Technical Memorandum

Co-Located Chemical Sampling Results for Sediment Samples at Area IV



Santa Susana Field Laboratory Ventura County, California — Revision 1

Prepared for:

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

Prepared by:

CDM Federal Programs Corporation (CDM Smith)

Prepared under:

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

January 2012

Technical Memorandum

Co-Located Chemical Sampling Results for Sediment Samples at Area IV, Santa Susana Field Laboratory Ventura County, California

Revision 1

Prepared for:

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

Prepared by:

CDM Federal Programs Corporation (CDM Smith)

Prepared under:

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

January 2012

Technical Memorandum

Co-Located Chemical Sampling Results for Sediment Samples at Area IV, Santa Susana Field Laboratory Ventura County, California

Revision 1

Contract DE-AM09-05SR22404
CDM Task Order DE-AT30-08CC60021/ET17

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

Prepared by: _____ _____
Margaret Bloisa, P.G. Date
CDM Smith Geologist

Approved by: _____ _____
John Wondolleck Date
CDM Smith Project Manager

Contents

Section 1 Introduction

1.1 Co-Located Sediment Chemical Sampling Objectives 1-1
1.2 Basis for the Area IV and Northern Buffer Zone Drainage Sediment Sampling 1-2
1.3 Geology 1-2
1.4 Technical Memorandum Organization 1-2

Section 2 Field Sampling and Analytical Methods

2.1 Drainage Sediment Sampling 2-1
2.2 Sample Handling 2-2
2.3 Field Quality Control Procedures 2-2
2.3.1 Field Duplicates and MS/MSD Samples 2-2
2.3.2 Equipment Rinsate Blank Samples 2-2
2.3.3 Field Blank Samples 2-5
2.3.4 Decontamination of Sampling Equipment 2-5
2.4 Analytical Laboratory Methods and Procedures 2-5
2.4.1 Analytical Methods 2-5
2.4.2 Analytical Method Modifications 2-6
2.5 Data Review Processes 2-7
2.6 Deviations from the WP/FSAP 2-8
2.6.1 Field 2-8
2.6.2 Analytical 2-9

Section 3 Drainage Sediment Sampling Results

Section 4 Data Usability Assessment

4.1 Usability Summary 4-1
4.2 Data Validation Procedures 4-1
4.3 Quality Assurance Objectives 4-2
4.4 Summary of Field and Laboratory QA Activities 4-3
4.5 Field Quality QA/QC 4-3
4.6 Laboratory Quality QA/QC 4-4
4.7 Data Quality Indicators 4-4
4.7.1 Precision 4-4
4.7.2 Accuracy 4-6
4.7.3 Blank Contamination 4-9
4.7.4 Representativeness, Comparability, and Sensitivity 4-10
4.7.4.1 Representativeness 4-10
4.7.4.2 Comparability 4-10
4.7.4.3 Sensitivity 4-11
4.8 Review of Selected Validation Reports 4-12
4.9 Data Completeness 4-12

4.10 Assessment of Data Usability and Reconciliation with WP/FSAP Goals 4-14

Section 5 References

List of Tables

2-1 Drainage Sediment Samples Collected from Area IV and Northern Buffer Zone
2-2 Analytical Methods and Method Modifications
3-1 Summary of Analytical Results for Chemicals – Validated Data Drainage Sediments
4-1 Sample Delivery Groups and Validation Levels
4-2 Equipment Blank for Drainage Sediment Samples - Detected Results Only
4-3 Summary of Data Completeness Following Data Validation

List of Figures

2-1 Sediment Sample Locations

Appendices

Appendix A Analytical Results Tables

Appendix B Laboratory Reports

Appendix C Data Usability Assessment Report and Data Validation Reports

Appendix D Master Database Table

Acronyms

°C	degrees Celsius
%D	percent drift
%R	percent recovery
AOC	Administrative Order on Consent
ASTM	American Society of Testing and Materials
bgs	below ground surface
Boeing	The Boeing Company
CAR	corrective action request
CDM	CDM Federal Programs Corporation
CMI	Corrective Measures Implementation
CMS	Corrective Measures Study
COC	chain of custody
D&D	decontamination and decommissioning
DL	detection limit
DOE	Department of Energy
DPT	direct push technology
DQI	data quality indicator
DQO	data quality objective
DTSC	Department of Toxic Substances Control
DUAR	Data Usability and Assessment Report
EDD	electronic data deliverable
ELAP	Environmental Laboratory Accreditation Program
EPA	United States Environmental Protection Agency
ETEC	Energy Technology Engineering Center
FSAP	Field Sampling and Analysis Plan
FTL	Field Team Leader
g	gram
GIS	geographical information system
HAZWOPER	Hazardous Waste Operations and Emergency Response
HGL	HydroGeoLogic, Inc.
ICP	inductively coupled plasma
IDW	investigative derived waste
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
LLI	Lancaster Laboratories Inc.
µg/L	micrograms per liter
mL	milliliter
MS	matrix spike
MSD	matrix spike duplicate
NASA	National Aeronautics and Space Administration
NBZ	Northern Buffer Zone
NELAP	National Environmental Laboratory Accreditation Program
NOAA	National Oceanic and Atmospheric Administration

pg/L	picograms per liter
PAH	polyaromatic hydrocarbon
PARCCS	precision, accuracy, representativeness, completeness, comparability, and sensitivity
PCB	polychlorinated biphenyl
PCT	polychlorinated triphenyl
pg/L	picograms per liter
PID	photoionization detector
ppm	parts per million
PRG	preliminary remediation goal
QA	quality assurance
QAPP	quality assurance project plan
QC	quality control
RBSL	risk-based screening level
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RL	reporting limit
RPD	relative percent difference
SDG	sample delivery group
SHASP	site health and safety plan
SIM	selective ion monitoring
SSFL	Santa Susana Field Laboratory
SVOC	semi-volatile organic compound
SWMU	solid waste management unit
TM	Technical Memorandum
WP/FSAP	Work Plan/Field Sampling and Analysis Plan

Section 1
Introduction

This technical memorandum (TM) presents the results of chemical analysis of sediment samples collected under the *Work Plan/ Field Sampling and Analysis Plan, Co-Located Chemical Sediment Sampling at Area IV, Santa Susana Field Laboratory* (WP/FSAP) (CDM Federal Programs Corporation [CDM] 2010). Sediment samples were collected from drainages within Area IV and in the Northern Buffer Zone (NBZ). A sample of the sediment in the bottom of the Building 4056 excavation was also collected.

This TM provides a description of the sampling activities, a discussion of the analytical data review findings, and the analytical results. The TM does not provide detailed interpretation of the results. The data provided in this TM are intended to be combined with data collected under the prior Resource Conversation and Recovery Act (RCRA) Facility Investigation (RFI) efforts into the Area IV soil chemical database. A data gap analysis will be performed to assess the adequacy of Area IV data as a whole in defining nature and extent of chemicals in soil for purposes of remedy determination.

1.1 Co-Located Sediment Chemical Sampling Objectives

The radiological characterization study being performed by the United States Environmental Protection Agency (EPA) includes collection of surface and subsurface soil, and drainage sediment samples throughout Area IV of Santa Susana Field Laboratory (SSFL) and the NBZ for analysis of radionuclides. The California Department of Toxic Substances Control (DTSC) and Department of Energy (DOE) suggested that soil/sediment samples collected by EPA also be analyzed for chemical analytes. DTSC and DOE agreed that the chemical sampling would be done by DOE's contractor, CDM. EPA's contractor, Hydrogeologic, Inc. (HGL) collected all EPA-proposed drainage sediment samples. CDM was responsible for the management, shipment, and laboratory analyses of the samples.

The *Administrative Order on Consent for Remedial Action* Docket Number HSA-CO 10/11-037 between DTSC and DOE was signed on December 6, 2010. The *Administrative Order on Consent* (AOC) is a legally binding order that describes the characterization of Area IV and NBZ soils/sediments and further defines DOE's obligations in relation to radiologic and chemical cleanup of soils within these areas. It also stipulates that during Phase 1 of the chemical investigation activities, DOE is to analyze a soil sample for chemical constituents at each location where EPA collects a sample for radiological analyses.

1.2 Basis for the Area IV and Northern Buffer Zone Drainage Sediment Sampling

HGL's *Final Phase I Field Sampling Plan for Groundwater, Surface Water, and Sediment, Area IV Radiological Study, Santa Susana Field Laboratory* (HGL 2010a) includes a description of the project objectives, the scope of work, laboratory analytical suites, and sample collection and other standard field operation methods. Table 3.4 of HGL's sampling plan includes proposed sediment sample locations EPASED01 through EPASED35.

The *Surface Water and Sediment Addendum to the Phase I Field Sampling Plan for Groundwater, Surface Water, and Sediment, Santa Susana Field Laboratory, Area IV Radiological Study* (HGL 2010b) was prepared by HGL to support the field implementation of their surface water and sediment sampling program in Area IV. The addendum documented the technical justification for deleting one alternate sediment sample location (EPASED15A), relocating two locations (EPASED15 and EPASED34), and adding locations (EPASED36 through EPASED40), based on stakeholder comments received during the Technical Breakout Session held on November 18, 2010.

1.3 Geology

The drainage sediment locations are all within the Chatsworth Formation, which is composed predominantly of sandstone interbedded with siltstone and shale. The soils at the majority of the drainage locations sampled are predominately fine to medium or coarse grained sand and silt with no clay. Locations EPASED04, EPASED05, EPASED16, EPASED19, EPASED26, and EPASED36 contained as much as 20 percent clay.

Additional information regarding the geology in Area IV can be found in Volume I of *Group 5 – Central Portion of Areas III and IV RCRA Facility Investigation Report Santa Susana Field Laboratory, Ventura County, California* (CH2M Hill 2008).

1.4 Report Organization

This TM includes the following sections:

- **Section 1 - Introduction –** Summarizes the basis and objectives of the co-located drainage sediment sampling
- **Section 2 - Field Sampling and Analytical Methods –** Provides details regarding field sampling procedures and laboratory analytical methods
- **Section 3 - Drainage Sediment Sample Results –** Provides a summary of results for each analyte; the appendices provide the overall results

- **Section 4 - Data Usability Assessment –** Discusses the outcome of the data review and validation processes
- **Section 5 - References**

THIS PAGE INTENTIONALLY LEFT BLANK

Section 2
Field Sampling and Analytical Methods

The Area IV and NBZ drainage locations were sampled during December 13, 2010 through December 22, 2010 and on January 13, 2011. The sediment sample from the Building 4056 excavation was collected on May 23, 2011. All sediment sample locations are shown on Figure 2-1.

Table 2-1 includes sample number and date of collection for the drainage sediment samples; location descriptions; sediment sample description including percentage of clay, silt, sand, and gravel; and any other pertinent information.

2.1 Drainage Sediment Sampling

The drainage sediment samples were collected from the surface to 6-inches below ground surface (bgs). The surface of the sample area was prepared by HGL's sampling personnel by removing leaves, grass, and any other surface debris. Samples to be analyzed for semi-volatile organic compounds (SVOCs) and polyaromatic hydrocarbons (PAHs) were collected first using a slide hammer equipped with a 2-inch diameter and 6-inch long stainless steel sample liner. The sampler was pounded into the soil until its top was flush with the surface and then removed from the soil. The sample sleeve was removed from the sampler and both ends capped with a Teflon liner and a plastic cap.

The sediment for the remaining sample analytes was collected from a circular hole, approximately 12 inches in diameter to a depth of 6 inches bgs, using a stainless steel trowel and transferred to a stainless steel bowl and homogenized. Wood, debris, and any other materials larger than 0.25 inches were removed prior to homogenization. After homogenization, the sample was placed into one or more 16-ounce glass jars. Adhesive sample labels, completed with all sampling information, were affixed to both the sample sleeves and jars. All sleeves and jars were placed into plastic baggies. All samples were analyzed for primary sample analytes only (i.e., SVOCs, PAHs, metals, hexavalent chromium, fluoride, polychlorinated biphenyls [PCBs], and polychlorinated triphenyls [PCTs], dioxins, perchlorate, pesticides, and herbicides), with the exception of the sample collected from the Building 4056 excavation, which was also analyzed for pH, methyl mercury, and organotins in addition to the primary analytes.

The sediment sample from the Building 4056 excavation was collected using an Ekman sampler; a box-style sediment sampler with a spring-loaded clam-shell bottom. The sampler was dropped with the clam-shell open downward into the water until it made contact with the bottom of the water body. A weight dropped along the line attached to the top of the sampler serves as a "messenger" that (closes the clam shell-operated release device. The closing of the clam-shell doors scoops sample material into the sampling box. The sampler has overlapping cover plates, loosely hinged at the top of the box, which permits an outflow of water during descent of the

device as it is dropped to the bottom, and closes tightly to prevent wash-out of sediment during ascent. After the sampler was retrieved from the excavation, sediment was transferred directly from the sampler into the proper sampling jars using a disposable plastic scoop.

2.2 Sample Handling

All sediment samples collected were transferred by the field sampler to CDM's Field Team Leader (FTL). The FTL ensured that the sample labels were legible and completed correctly. Any discrepancies were discussed with the field sampler and corrections to the sample labels made as needed. All sample labels were covered with clear tape, the sleeves and jars placed back into their plastic baggie, and refrigerated.

All sampling information was placed onto a chain of custody (COC) form. The sampler reviewed the COC and any discrepancies were corrected by the FTL. Each completed COC was signed by the sampler and the FTL as the individual responsible for release of the samples to the courier. All samples were packed into coolers in accordance with Section 6.4 of the *Work Plan/ Field Sampling and Analysis Plan, Co-Located Chemical Sediment Sampling at Area IV, Santa Susana Field Laboratory* (CDM 2010).

2.3 Field Quality Control Procedures

Quality control (QC) samples collected in the field included field duplicates, matrix spike (MS)/matrix spike duplicate (MSD) samples, equipment rinsate blanks, and field blanks.

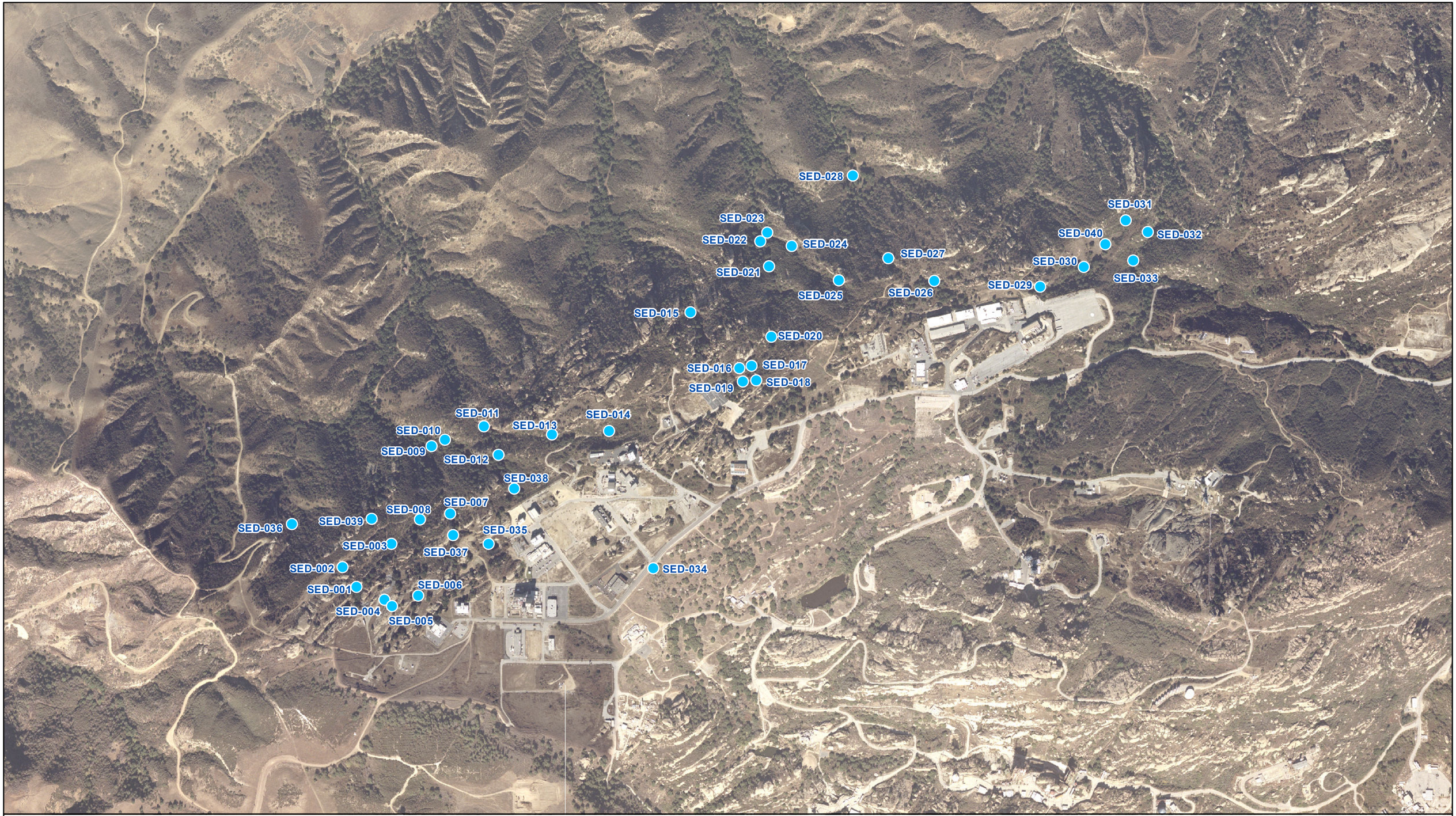
2.3.1 Field Duplicates and MS/MSD Samples

Both field duplicates and MS/MSD samples were collected at a frequency of 1 per 20 "parent" sediment samples collected; thus both the field duplicate and MS/MSD samples were collected from the same location. The duplicate samples were submitted to the laboratory as separate (and blind) sample from the parent sample. The MS/MSD samples are double volume of the parent samples.

Two duplicates and MS/MSD samples were collected for the sediment samples and analyzed for primary analytes only. A third duplicate and MS/MSD sample was collected for methyl mercury and organotins analyses only.

2.3.2 Equipment Rinsate Blank Samples

Equipment rinsate blanks were to be prepared and submitted for chemical analysis at a minimum frequency of 1 per 20 parent samples collected. One equipment rinsate blank sample was collected in association with the drainage sediment sampling. No equipment rinsate blanks were collected for methyl mercury and organotins since the one sample was collected using a disposable scoop.



N

Legend

- Sediment Sample Location

Sediment Sample Locations

0 500 1,000 2,000 Feet

Santa Susana
Ventura County, California
Figure 2-1

CDM Smith

Loveca Z:\gis\Public\Santa_Susana\MXD\Sediment_Locations_SSFL_20110721.mxd 1/3/2012

Table 2-1
Drainage Sediment Samples Collected from Area IV and Northern Buffer Zone

Location ID	Drainage Designation	EPA Sampling Rationale and Location Description	Sample Date	Sample Time	Analyses	Sample Number	EPA Sample Description	Percent Clay	Percent Silt	Percent Sand	Percent Gravel	Other Notes
EPASED 01	Area IV 1	Downgradient of Outfall 5	12.17.10	1241	Primary	SED-001-SIV-SD-0.0-0.5	Fine (F) to Medium (M) SAND, non-plastic, loose, moist, plant debris	0	35	65	0	
EPASED 02	Not Applicable	Associated with surface water sampling location EPASW02	12.21.10	0950	Primary	SED-002-SIV-SD-0.0-0.5MS	F to M SAND, non-plastic, loose, moist, plant debris	0	35	65	0	
EPASED 03	Area IV 2	Downgradient of Outfalls 5 and 6	12.20.10	0946	Primary	SED-003-SIV-SD-0.0-0.5	F to M SAND, subangular to subrounded GRAVEL, non-plastic, very loose	0	15	85	Trace	Location underwater from rain run-off
EPASED 04	Area IV 2	Characterize the sediment within the drainage	12.17.10	1142	Primary	SED-004-SIV-SD-0.0-0.5	F SAND, medium-plasticity, soft, moist, plant material	20	35	45	0	Below ground surface=groundwater
EPASED 05	FSDF Drainage	Characterize the sediment within the drainage	12.20.10	0830	Primary	SED-005-SIV-SD-0.0-0.5MS	F to Coarse (C) SAND, subangular to subrounded GRAVEL, low plasticity, soft, moist, plant material	10	30	60	Trace	
EPASED 06	B009 Drainage	Characterize the sediment within the drainage	12.17.10	1525	Primary	SED-006-SIV-SD-0.0-0.5	F SAND, low plasticity, soft, moist, plant material	0	60	40	0	
EPASED 07	Area IV 4	Downgradient of Outfall 7	12.20.10	1330	Primary	SED-007-SIV-SD-0.0-0.5	F to C SAND, subangular to subrounded GRAVEL, low plasticity, soft, moist, plant material, broken pieces of asphalt, burnt wood	0	20	80	Trace	Raining heavily, location wet. Debris in drainage near sample location
EPASED 08	Area IV 3	Characterize the sediment within the drainage	12.20.10	1039	Primary	SED-008-SIV-SD-0.0-0.5	F to C SAND, subangular to subrounded GRAVEL, low plasticity, very loose, moist plant material	0	20	80	Trace	Location underwater from rain run-off
EPASED 09	Area IV 4	Downgradient of Outfall 7, and on the boundary of the Northern Buffer Zone (NBZ)	01.13.11	0945	Primary	SED-009-SIV-SD-0.0-0.5	F to C SAND, non-plastic, loose, moist, plant material	0	30	70	0	Drainage contained primarily SS and is on an ~ 70 degree slope
EPASED 10	Area IV 5	Characterize sediment within drainage at boundary of the NBZ	12.22.10	1010	Primary	SED-010-SIV-SD-0.0-0.5	F to C SAND, subangular to subrounded GRAVEL, non-plastic, very loose, wet, plant material	0	15	80	5	
EPASED 11	Area IV 6	Downgradient of Outfall 3	12.16.10	1418	Primary	SED-011-SIV-SD-0.0-0.5	F to M SAND, low plasticity, very soft, loose, moist, plant material	0	40	60	0	
EPASED 12	Area IV 5	Characterize the sediment within the drainage	12.17.10	1024	Primary	SED-012-SIV-SD-0.0-0.5	F to C SAND, subangular to subrounded GRAVEL, low plasticity, loose, moist, plant material	0	15	80	5	SS boulders throughout drainage/ravine
EPASED 13	Area IV 6	Downgradient of Outfall 3	12.16.10	1526	Primary	SED-013-SIV-SD-0.0-0.5	F to C SAND, low plasticity,very soft, loose, moist, plant material	0	40	60	0	
EPASED 14	Area IV 6	Upgradient of Outfall 3 and downgradient of RMHF building	12.17.10	0844	Primary	SED-014-SIV-SD-0.0-0.5	F to C SAND, non-plastic,loose, moist, plant material	0	25	75	0	Raining during sampling
EPASED 15	Not Applicable	Characterize sediment within drainage at border of the NBZ	12.21.10	1305	Primary	SED-015-SIV-SD-0.0-0.5	F to C SAND, low plasticity,very soft, loose, moist, plant material	0	30	70	0	
EPASED 16	Area IV 7	Associated with surface water sampling location EPASW05	12.15.10	1341	Primary	SED-016-SIV-SD-0.0-0.5	F to M SAND, low plasticity, very soft, loose, moist, plant material	10	35	55	0	Sandstone at 6 inches
EPASED 17	Area IV 7	Characterize the sediment below fill material at surface water sampling location EPASW09	12.16.10	1045	Primary	SED-017-SIV-SD-0.0-0.5	F to C SAND, sub angular GRAVEL, low plasticity, very soft, loose, moist	0	40	60	Trace	Drainage contained considerable amt. of debris (concrete, wire)
EPASED 18	Area IV 7	Characterize the sediment below surface water sampling location EPASW08	12.15.10	1231	Primary	SED-018-SIV-SD-0.0-0.5	F to M SAND, low plasticity, very soft, moist, plant material	0	45	55	0	
EPASED 19	Area IV 7	Downgradient of Outfall 4; sediment from pond	12.16.10	0930	Primary	SED-019-SIV-SD-0.0-0.5	F to M SAND, trace C SAND, low plasticity, very soft, moist, plant material	10	35	55	0	
EPASED 20	Area IV 7	Downgradient of Outfall 4 and accessible from Area IV	12.16.10	1140	Primary	SED-020-SIV-SD-0.0-0.5	F to C SAND, trace C SAND, low plasticity, very soft, moist, plant material	0	30	70	0	
EPASED 21	Area IV 7	Downgradient of Outfall 4; mid-way down drainage, accessible from Area IV	12.15.10	0921	Primary	SED-021-SIV-SD-0.0-0.5	F to C SAND, loose, moist, plant material	0	10	90	0	Drainage/ravine contained numerous sandstone boulders and heavy brush
EPASED 22	Area IV 7	Downgradient of Outfall 4 and at the boundary of the NBZ	12.14.10	1008	Primary	SED-022-SIV-SD-0.0-0.5	F to C SAND, non-plastic, loose, moist, plant material	0	30	70	0	Drainage contained numerous SS boulders
EPASED 23	Not Applicable	Characterize sediment within drainage at boundary of the NBZ	12.14.10	0919	Primary	SED-023-SIV-SD-0.0-0.5	F to C SAND, subangular to subrounded GRAVEL, non-plastic, loose, moist, plant material	0	35	65	Trace	
EPASED 24	Not Applicable	Characterize the sediment within the drainage	12.14.10	1116	Primary	SED-024-SIV-SD-0.0-0.5	F to C SAND, non-plastic, loose, moist, plant material	0	30	70	0	
EPASED 25	Not Applicable	Characterize the sediment within the drainage	12.14.10	1244	Primary	SED-025-SIV-SD-0.0-0.5	F to C SAND, non-plastic, loose, moist, plant material	0	30	70	0	
EPASED 26	Not Applicable	Downgradient of Outfall 4; characterize sediment within drainage	12.14.10	1522	Primary	SED-026-SIV-SD-0.0-0.5	F to M SAND, low plasticity, soft, moist, plant material	10	50	40	0	
EPASED 27	Not Applicable	Downgradient of Outfall 4; characterize sediment within drainage	12.14.10	1559	Primary	SED-027-SIV-SD-0.0-0.5	F to M SAND, non-plastic, loose, moist, plant debris	0	30	70	0	
EPASED 28	Not Applicable	Downgradient of Outfall 4 at the border of the NBZ	01.13.11	1115	Primary	SED-028-SIV-SD-0.0-0.5	F to C SAND; subangular to subrounded GRAVEL, non-plastic, very loose, wet, plant material	0	30	70	Trace	Pooled water still in drainage from rains, drainage primarily sandstone
EPASED 29	North 1.15 – OB	Characterize the sediment within the drainage	12.13.10	1152	Primary	SED-029-SIV-SD-0.0-0.5	F to C SAND; subangular to subrounded GRAVEL, non-plastic, very loose, plant material	0	25	70	5	
EPASED 30	North 1.15 – OB	Characterize the sediment within the drainage	12.13.10	1113	Primary	SED-030-SIV-SD-0.0-0.5	F to M SAND, low plasticity, very soft, moist, plant material	0	30	70	0	
EPASED 31	North 1.15 – OB	Characterize sediment within drainage at border of the NBZ	12.13.10	0920	Primary	SED-031-SIV-SD-0.0-0.5	F to C SAND, subangular to subrounded GRAVEL, non-plastic, loose, moist, plant material	0	30	70	Trace	
EPASED 32	North 1 – OB	Characterize sediment within drainage at border of the NBZ	12.13.10	1457	Primary	SED-032-SIV-SD-0.0-0.5	F to C SAND, subangular to subrounded GRAVEL, non-plastic, loose, moist, plant material	0	25	75	Trace	
EPASED 33	North 1 – OB	Characterize sediment downgradient of Outfall 9 at northern boundary of the NBZ	12.13.10	1540	Primary	SED-033-SIV-SD-0.0-0.5	F to C SAND, subangular to subrounded GRAVEL, very loose, moist	0	10	85	5	
EPASED 34		Characterize sediment within a potential drainage leading westward from the western boundary of the NBZ.	12.20.10	1530	Primary	SED-034-SIV-SD-0.0-0.5	F to C SAND, subangular to subrounded GRAVEL, non-plastic, loose, moist, plant material	0	20	80	Trace	Location under water
EPASED 35	Building 4056	Characterize sediment in pond in Building 4056 excavation	05.23.11	1500	Primary, Methyl Hg & organotins	SED-035-SIV-SD SED-035-SIV-SDMS	Fine grained silt, wet, swampy odor, very black, containing organic matter such as leaves and twigs.	-	-	-	-	
EPASED 36		Characterize sediment that may have originated in sodium burn pit area or from Arness fire road in northwest corner of NBZ	12.21.10	1145	Primary	SED-036-SIV-SD-0.0-0.5	F SAND, low plasticity, soft, moist, plant material	15	40	45	0	
EPASED 37		Characterize sediment potentially originating from Building 56 Landfill, northwest of Building 56 excavation.	12.20.10	1430	Primary	SED-037-SIV-SD-0.0-0.5	F to C SAND, subangular to subrounded GRAVEL, non-plastic, loose, wet, plant material	0	25	75	Trace	Considerable amount of debris (barbed wire, tin cans, concrete & asphalt in drainage near sample location
EPASED 38		Characterize sediment transported downgradient from SNAP area.	12.21.10	1515	Primary	SED-038-SIV-SD-0.0-0.5	F to C SAND, non-plastic, loose, moist, plant material	0	25	75	0	
EPASED 39		Characterize sediment transported downgradient from roads potentially used to facilitate releases from discarded wastes.	12.21.10	1055	Primary	SED-039-SIV-SD-0.0-0.5	F to C SAND, non-plastic, loose, moist, plant material	0	15	85	0	
EPASED 40		Further evaluate plutonium result reported in Boeing's paper "Plutonium-238 at Brandeis-Bardin"	12.13.10	1019	Primary	SED-040-SIV-SD-0.0-0.5	F to C SAND, non-plastic, loose, moist, plant material	0	30	70	0	

Abbreviations:
FSDF - Former Sodium Diposal Facility
RMHF - Radioactive Materials Handling Facility
SNAP - Systems Nuclear Auxiliary Power
Primary analyses include: metals, fluoride, hexavalent chromium, SVOCs/PAHs, PCBs/PCTs, dioxins/furans, perchlorate, pesticides, and herbicides. pH was also included as a primary analyte for sample EPASED 35.

2.3.3 Field Blank Samples

Initially, to match the collection of field blank samples associated with the radionuclide sampling, field blanks for chemical analyses were collected on a daily basis. However, DTSC agreed to reduce the frequency of collection of field blank samples to once per lot number of the American Society for Testing and Materials (ASTM) Type II water that HGL used for equipment decontamination. At the time the sediment samples were collected, only one field blanks was collected for each lot number of ASTM water that HGL uses. Field blanks were collected for primary analyses in conjunction with the sediment samples. Field blank FB08-SIV-052311 was collected on May 23, 2011 and submitted for organotins and methyl mercury analyses only.

2.3.4 Decontamination of Sampling Equipment

Because sampling was performed in remote drainages, enough equipment needed to complete a full day of sampling was carried by the field crew. Therefore, all reusable sampling equipment needed for a day of sediment sampling was cleaned the day before sampling. This included the trowels, bowls, and the portion of the hand auger that comes into contact with the soil and into which the stainless steel sleeves are inserted.

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

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

Each piece of sampling equipment was then wrapped in oil-free aluminum foil, or placed in a closed plastic, stainless steel, glass, or Teflon container.

2.4 Analytical Laboratory Methods and Procedures

2.4.1 Analytical Methods

The analytical methods for the drainage sediment sampling consist of one primary "suite." The primary suite of analyses was performed on all sediment samples and includes:

- Metals using EPA Methods 6010B/6020, 7471A (mercury), and 7199 (chromium VI)
- Fluoride using EPA Method 300.0
- SVOCs using EPA Method 8270C and PAHs using Method 8270 selective ion monitoring (SIM)

- PCBs and PCTs using EPA Method 8082
- Dioxins/furans using EPA Method 1613B
- Perchlorate using EPA Method 314.0 (and EPA Method 6850 for verification of nondetects at a rate of 10 percent of the samples submitted)
- Pesticides using EPA Method 8081A
- Herbicides using EPA Method 8151A

In addition, the Building 4056 excavation sediment sample was analyzed for:

- pH using EPA Method 9045C
- Methyl mercury using EPA Method 1630M
- Organotins using National Oceanic and Atmospheric Administration (NOAA) status and trends method

2.4.2 Analytical Method Modifications

The analytical laboratory used for the drainage sediment sampling effort was Lancaster Laboratories, Inc. (LLI) of Lancaster, Pennsylvania. Lancaster was selected out of five laboratories that submitted proposals based on their proposed method detection limits. Selection of LLI as the co-located soil analytical laboratory was discussed with the community on October 10, 2010.

The analytical methods identified for the co-located soil sampling were selected to be consistent with the methods used for the RFI. These analytical methods are presented in the *Quality Assurance Project Plan, Santa Susanna Field Laboratory RCRA Facility Investigation, Surficial Media Operable Unit* (RFI Quality Assurance Project Plan [QAPP]) (MECx 2009) and are listed in Table 2-2. CDM also evaluated the RFI QAPP detection limits relative to risk-based soil criteria. There were several instances where risk-based soil values were lower than the RFI QAPP limits. To determine whether the analytical method detection limit could be lowered, method modifications were discussed with DTSC and LLI chemists at the time of their implementation. The ability of the laboratory to achieve project reporting limits (RLs) and quality control (QC) criteria using these method modifications remains under evaluation by the project chemists. Table 2-2 identifies the methods that have been modified in an effort to lower respective detection limits and RLs.

Table 2-2 Analytical Methods and Method Modifications

Parameter Group	Analytical Method	Method Modification?
Select SVOCs	EPA 8270C SIM	No
Semivolatile Organics	EPA 8270C	No
PCBs/PCTs	EPA 8082	Yes
Pesticides	EPA 8081A	Yes
Herbicides	EPA 8151A	Yes
Perchlorate	EPA 6850	No
Perchlorate[1]	EPA 314	No
Organotins	NOAA Status and Trends	No
Dioxin/Furan	EPA 1613B	No
Metals	EPA 6010B/6020/7471A	No
Chromium VI	EPA 7199	No
Anions (Nitrate and Fluoride)	EPA 300	No
Methyl Mercury	EPA 1630M	No
pH	EPA 9045C	No

[1] Perchlorate was analyzed by Method 6850 on 10 percent of samples and by Method 314.0 on all samples

A description of the method modifications are listed below. The modifications primarily involved increasing the prescribed sample volume (soil mass extracted) and concentrating the resulting extract to a smaller final volume.

- Method 8082 (PCBs and PCTs) – 60 grams of sample is prepared and concentrated 5-fold to a final volume of 2 milliliter (mL)
- Method 8081A (Pesticides) – 60 grams of sample is prepared and taken to a final volume of 4 mL (due to extract cleanup techniques)
- Method 8151A (Herbicides) – 60 grams of sample is prepared and taken to a final volume of 2 mL

EPA Method 1630M was not modified by the laboratory, but is a modified method from EPA for methyl mercury.

2.5 Data Review Processes

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

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

deliverables including reports, electronic data deliverables, raw data, and the status of validation.

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

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

2.6 Deviations from the WP/FSAP

2.6.1 Field Sampling

Only one equipment rinsate blank was collected in association with the sediment samples. Two equipment rinsate blanks should have been collected for the number of sediment samples collected. Rinsate blanks are collected to evaluate the possibility that analytes observed in actual samples may be an artifact of sampling procedures. For example, the tools used to collect samples contained residual contamination from prior sampling. However, because the analytes observed in sediment samples reflect a pattern consistent with that observed in soil samples collected on site, it is believed that the results reflect sediment contamination and not an artifact of sediment sampling procedures.

Most of the samples collected from the NBZ were in locations accessible only by foot, thus the sampling team was in the field all day. It was not feasible or safe to carry a cooler with ice to and from these locations, so a field decision was made that all sediment samples would be placed on ice at the end of the work day. This was done so that all of the sediment samples were handled in the same manner, and some would not be refrigerated for a longer time than others prior to being shipped to the laboratory. Because the ambient temperatures never exceeded 70 degrees, it is not believed that the delay in cooling of samples compromised the data quality for the sediment samples.

2.6.2 Analytical

As noted in Section 2.4.2, some analytical methods have been modified for this project. All modifications were discussed with DTSC representatives to allow for their usage. The review of the analytical methods, the modifications, and the results indicates that the results addressed the objectives for the project for all analyses except for herbicides. A review of the herbicide results indicates that the method modifications did not achieve the lower reporting limit for some of the analytes. Data are currently under further review at it is likely that reporting limits may be elevated for some analytes.

THIS PAGE INTENTIONALLY LEFT BLANK

Section 3
Drainage Sediment Sampling Results

Because this TM only provides a presentation of the analytical results, data in this section are presented in a summary fashion. Table 3-1 provides a summary of the drainage sediment data. The table shows the chemicals analyzed for, the frequency at which they were detected, the minimum and maximum detected concentrations, the range of observed detections limits and RLs, and the location where the maximum concentration of each analyte was observed. When screening criteria are developed to assess where contamination exists above the applicable criteria, the drainage sediment data will be combined with RFI data to develop a better understanding of the extent of sediment contamination throughout the various drainages.

Appendix A provides the tables for all validated data by analytical method and sample location. Appendix B provides the summary analytical data reports as received from LLI. Appendix C presents the data usability and assessment report (DUAR) along with all validation reports. Appendix D is the master database of all sample results presenting the data validation "flags" (qualifiers).

THIS PAGE INTENTIONALLY LEFT BLANK

Table 3-1
Summary of Analytical Results for Chemical - Validated Data
Drainage Sediments

Group	Chemical	CAS No	Analytic Method	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Depth of Maximum Concentration (ft)
Inorganic	Fluoride	16984-48-8	300	34 / 40	0.90 J	2.9 J	0.84 - 1.2	1.1 - 1.5	mg/kg	SED-003-SIV SED-035-SIV	0 - 0.5
Inorganic	Aluminum	7429-90-5	6010B	40 / 40	7300	30200	5.13 - 7.12	20.4 - 28.3	mg/kg	SED-006-SIV	0 - 0.5
Inorganic	Iron	7439-89-6	6010B	40 / 40	10300	32800	4.81 - 6.67	20.4 - 28.3	mg/kg	SED-004-SIV	0 - 0.5
Inorganic	Lead	7439-92-1	6020	40 / 40	5.31 J	54.2 J	0.0105 - 0.0292	0.202 - 0.561	mg/kg	SED-019-SIV	0 - 0.5
Inorganic	Lithium	7439-93-2	6010B	40 / 40	11.1	42.9	0.22 - 0.31	2 - 2.8	mg/kg	SED-036-SIV	0 - 0.5
Inorganic	Magnesium	7439-95-4	6010B	40 / 40	2250	9100	2.59 - 3.59	10.2 - 14.2	mg/kg	SED-004-SIV	0 - 0.5
Inorganic	Manganese	7439-96-5	6010B	40 / 40	162	524	0.0796 - 0.11	0.51 - 0.708	mg/kg	SED-013-SIV	0 - 0.5
Inorganic	Mercury	7439-97-6	7471A	34 / 40	0.0039 J	0.927	0.0029 - 0.008	0.0998 - 0.28	mg/kg	SED-001-SIV	0 - 0.5
Inorganic	Methyl Mercury	22967-92-6	1630M	1 / 1	0.452	0.452	0.05 - 0.05	0.133 - 0.133	ug/kg	SED-035-SIV	0 - 0.5
Inorganic	Molybdenum	7439-98-7	6020	40 / 40	0.222	3.69 J	0.0506 - 0.0743	0.101 - 0.149	mg/kg	SED-019-SIV	0 - 0.5
Inorganic	Nickel	7440-02-0	6020	40 / 40	6.99 J	28 J	0.101 - 0.149	0.404 - 0.594	mg/kg	SED-036-SIV	0 - 0.5
Inorganic	Potassium	7440-09-7	6010B	40 / 40	1580 J	6980	18.4 - 25.5	51 - 70.8	mg/kg	SED-004-SIV	0 - 0.5
Inorganic	Silver	7440-22-4	6020	40 / 40	0.017 J	1.39 J	0.0121 - 0.0178	0.101 - 0.149	mg/kg	SED-032-SIV	0 - 0.5
Inorganic	Sodium	7440-23-5	6010B	40 / 40	54.3 J	161	38.1 - 52.8	102 - 142	mg/kg	SED-035-SIV	0 - 0.5
Inorganic	Strontium	7440-24-6	6010B	40 / 40	7.16 J	67.1	0.0633 - 0.0877	0.51 - 0.708	mg/kg	SED-004-SIV	0 - 0.5
Inorganic	Thallium	7440-28-0	6020	40 / 40	0.156	0.585	0.0303 - 0.0446	0.101 - 0.149	mg/kg	SED-036-SIV	0 - 0.5
Inorganic	Tin	7440-31-5	6010B	3 / 40	2.40 J	2.74 J	1.02 - 1.42	10.2 - 14.2	mg/kg	SED-009-SIV	0 - 0.5
Inorganic	Titanium	7440-32-6	6010B	40 / 40	637	1550	0.388 - 0.853	1.02 - 2.24	mg/kg	SED-013-SIV SED-004-SIV	0 - 0.5 0 0.5
Inorganic	Antimony	7440-36-0	6020	17 / 40	0.0859 J	0.931 J	0.0607 - 0.0892	0.202 - 0.297	mg/kg	SED-019-SIV	0 - 0.5
Inorganic	Arsenic	7440-38-2	6020	40 / 40	2.43 J	37.9	0.0607 - 0.111	0.404 - 0.594	mg/kg	SED-009-SIV	0 - 0.5
Inorganic	Beryllium	7440-41-7	6020	40 / 40	0.274	1.07 J	0.0162 - 0.0238	0.101 - 0.149	mg/kg	SED-019-SIV SED-036-SIV	0 - 0.5 0 0.5
Inorganic	Barium	7440-39-3	6020	40 / 40	62.3 J	202 J	0.109 - 0.16	0.404 - 0.594	mg/kg	SED-030-SIV	0 - 0.5
Inorganic	Boron	7440-42-8	6010B	37 / 40	3.23 J	15.7	0.908 - 1.26	5.1 - 7.08	mg/kg	SED-004-SIV	0 - 0.5
Inorganic	Cadmium	7440-43-9	6020	35 / 40	0.0800 J	2.23 J	0.0364 - 0.0555	0.101 - 0.149	mg/kg	SED-019-SIV	0 - 0.5
Inorganic	Chromium	7440-47-3	6020	40 / 40	10.8 J	43.6 J	0.121 - 0.178	0.404 - 0.594	mg/kg	SED-004-SIV	0 - 0.5
Inorganic	Cobalt	7440-48-4	6020	40 / 40	2.74 J	13.1 J	0.0202 - 0.0297	0.101 - 0.149	mg/kg	SED-036-SIV	0 - 0.5
Inorganic	Copper	7440-50-8	6020	40 / 40	4.44	50.5 J	0.0667 - 0.0981	0.404 - 0.594	mg/kg	SED-019-SIV	0 - 0.5
Inorganic	Vanadium	7440-62-2	6020	40 / 40	23.9 J	83.9 J	0.0222 - 0.0327	0.101 - 0.149	mg/kg	SED-004-SIV	0 - 0.5
Inorganic	Zinc	7440-66-6	6020	40 / 40	42.6 J	308 J	0.566 - 1.83	3.03 - 9.81	mg/kg	SED-019-SIV	0 - 0.5
Inorganic	Zirconium	7440-67-7	6010B	29 / 40	0.900 J	6.96	0.857 - 1.19	5.1 - 7.08	mg/kg	SED-004-SIV	0 - 0.5
Inorganic	Calcium	7440-70-2	6010B	40 / 40	1710	31400	6.26 - 8.67	20.4 - 28.3	mg/kg	SED-004-SIV	0 - 0.5
Inorganic	Phosphorus	7723-14-0	6010B	40 / 40	267 J	707 J	0.572 - 0.792	10.2 - 14.2	mg/kg	SED-019-SIV	0 - 0.5
Inorganic	Selenium	7782-49-2	6020	39 / 40	0.0829 J	0.517	0.0404 - 0.0594	0.404 - 0.594	mg/kg	SED-004-SIV	0 - 0.5
Inorganic	Chromium VI	18540-29-9	7199	17 / 40	0.25 J	0.95 J	0.21 - 0.3	1.1 - 1.5	mg/kg	SED-013-SIV	0 - 0.5
Inorganic	Perchlorate	14797-73-0	314	1 / 40	29.4 J	29.4 J	9.5 - 13.4	31.6 - 44.6	ug/kg	SED-008-SIV	0 - 0.5
Inorganic	Perchlorate	14797-73-0	6850	0 / 4	-	-	2.3 - 2.4	5.4 - 5.7	ug/kg		
Inorganic	Percent Moisture	MOIST	160.3M	44 / 45	5.1	32.7	0.5 - 0.5	0.5 - 0.5	%	SED-008-SIV	0 - 0.5
Inorganic	pH	pH	9045M	40 / 40	4.76	8.48	0.01 - 0.01	0.01 - 0.01	pH unit	SED-032-SIV	0 - 0.5
Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	22 / 40	0.0302 J	2.18	0.0133 - 0.208	1.05 - 1.49	ng/kg	SED-019-SIV	0 - 0.5
Dioxins	1,2,3,7,8,9-HxCDD	19408-74-3	1613B	32 / 40	0.156 J	26.7	0.0213 - 0.284	5.27 - 7.43	ng/kg	SED-019-SIV	0 - 0.5
Dioxins	OCDD	3268-87-9	1613B	40 / 40	6.76 J	49800 J	0.0323 - 0.593	10.5 - 14.9	ng/kg	SED-014-SIV	0 - 0.5
Dioxins	1,2,3,4,6,7,8-HpCDD	35822-46-9	1613B	40 / 40	1.22 J	4430 J	0.0324 - 0.713	5.27 - 7.43	ng/kg	SED-014-SIV	0 - 0.5
Dioxins	OCDF	39001-02-0	1613B	32 / 40	1.72 J	2920	0.0202 - 0.446	10.5 - 14.9	ng/kg	SED-014-SIV	0 - 0.5
Dioxins	1,2,3,4,7,8-HxCDD	39227-28-6	1613B	23 / 40	0.114 J	16.0	0.0213 - 0.274	5.27 - 7.43	ng/kg	SED-019-SIV	0 - 0.5
Dioxins	1,2,3,7,8-PeCDD	40321-76-4	1613B	23 / 40	0.170 J	4.86 J	0.0296 - 0.254	5.27 - 7.43	ng/kg	SED-019-SIV	0 - 0.5
Dioxins	2,3,7,8-TCDF	51207-31-9	1613B	31 / 40	0.0902 J	9.59	0.0267 - 0.318	1.05 - 1.49	ng/kg	SED-019-SIV	0 - 0.5
Dioxins	1,2,3,4,7,8,9-HpCDF	55673-89-7	1613B	18 / 40	0.314 J	85.3	0.0233 - 0.518	5.27 - 7.43	ng/kg	SED-014-SIV	0 - 0.5
Dioxins	2,3,4,7,8-PeCDF	57117-31-4	1613B	26 / 40	0.266 J	9.60	0.0147 - 0.172	5.27 - 7.43	ng/kg	SED-019-SIV	0 - 0.5
Dioxins	1,2,3,7,8-PeCDF	57117-41-6	1613B	29 / 40	0.192 J	18.1	0.0142 - 0.17	5.27 - 7.43	ng/kg	SED-019-SIV	0 - 0.5
Dioxins	1,2,3,6,7,8-HxCDF	57117-44-9	1613B	19 / 40	0.196 J	12.4	0.0143 - 0.191	5.27 - 7.43	ng/kg	SED-014-SIV	0 - 0.5

Table 3-1
Summary of Analytical Results for Chemical - Validated Data
Drainage Sediments

Group	Chemical	CAS No	Analytic Method	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Depth of Maximum Concentration (ft)
Dioxins	1,2,3,6,7,8-HxCDD	57653-85-7	1613B	35 / 40	0.149 J	83.8	0.0225 - 0.286	5.27 - 7.43	ng/kg	SED-014-SIV	0 - 0.5
Dioxins	2,3,4,6,7,8-HxCDF	60851-34-5	1613B	18 / 40	0.510 J	13.7	0.0158 - 0.223	5.27 - 7.43	ng/kg	SED-019-SIV	0 - 0.5
Dioxins	1,2,3,4,6,7,8-HpCDF	67562-39-4	1613B	29 / 40	0.459 J	455	0.0165 - 0.297	5.27 - 7.43	ng/kg	SED-014-SIV	0 - 0.5
Dioxins	1,2,3,4,7,8-HxCDF	70648-26-9	1613B	19 / 40	0.287 J	18.1	0.017 - 0.234	5.27 - 7.43	ng/kg	SED-014-SIV	0 - 0.5
Dioxins	1,2,3,7,8,9-HxCDF	72918-21-9	1613B	11 / 40	0.217	2.86 J	0.0192 - 0.287	5.27 - 7.43	ng/kg	SED-014-SIV	0 - 0.5
PCBs	Aroclor 1260	11096-82-5	8082	31 / 40	0.65 J	180	0.36 - 7.1	1.8 - 37	ug/kg	SED-019-SIV	0 - 0.5
PCBs	Aroclor 1254	11097-69-1	8082	32 / 40	1.1 J	300	0.36 - 7.1	1.8 - 37	ug/kg	SED-008-SIV	0 - 0.5
PCBs	Aroclor 1268	11100-14-4	8082	0 / 40	-	-	0.35 - 7.1	1.8 - 37	ug/kg		
PCBs	Aroclor 1221	11104-28-2	8082	0 / 40	-	-	0.38 - 11	1.8 - 37	ug/kg		
PCBs	Aroclor 5460	11126-42-4	8082	28 / 40	1.3 J	170 J	1.1 - 22	3.5 - 71	ug/kg	SED-029-SIV	0 - 0.5
PCBs	Aroclor 1232	11141-16-5	8082	0 / 40	-	-	0.38 - 11	1.8 - 37	ug/kg		
PCBs	Aroclor 5442	12642-23-8	8082	0 / 40	-	-	1.1 - 22	3.5 - 71	ug/kg		
PCBs	Aroclor 1248	12672-29-6	8082	2 / 40	4.8	17 J	0.35 - 7.1	1.8 - 37	ug/kg	SED-026-SIV	0 - 0.5
PCBs	Aroclor 1016	12674-11-2	8082	0 / 40	-	-	0.35 - 7.1	1.8 - 37	ug/kg		
PCBs	Aroclor 1262	37324-23-5	8082	0 / 40	-	-	0.35 - 7.1	1.8 - 37	ug/kg		
PCBs	Aroclor 1242	53469-21-9	8082	0 / 40	-	-	0.38 - 11	1.8 - 37	ug/kg		
PCBs	Aroclor 5432	63496-31-1	8082	0 / 40	-	-	1.1 - 22	3.5 - 71	ug/kg		
Herbicides	Dichlorprop	120-36-5	8151A	1 / 40	2.0 J	2.0 J	0.84 - 9.2	1.8 - 20	ug/kg	SED-006-SIV	0 - 0.5
Herbicides	Dicamba	1918-00-9	8151A	14 / 40	0.49 J	1.9	0.42 - 4.6	0.74 - 14	ug/kg	SED-001-SIV	0 - 0.5
Herbicides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	0 / 40	-	-	4.6 - 51	9.5 - 100	ug/kg		
Herbicides	Dinitrobutyl Phenol	88-85-7	8151A	0 / 40	-	-	0.84 - 9.2	2.5 - 28	ug/kg		
Herbicides	MCPP	93-65-2	8151A	9 / 40	200 J	430	79 - 11000	260 - 11000	ug/kg	SED-016-SIV	0 - 0.5
Herbicides	2,4,5-TP	93-72-1	8151A	5 / 40	0.20	2.0 J	0.079 - 0.86	0.18 - 2	ug/kg	SED-035-SIV	0 - 0.5
Herbicides	2,4,5-T	93-76-5	8151A	2 / 40	0.33 J	0.38 J	0.087 - 1	0.18 - 2	ug/kg	SED-022-SIV	0 - 0.5
Herbicides	MCPA	94-74-6	8151A	11 / 40	310	1800 J	81 - 1700	270 - 2900	ug/kg	SED-022-SIV	0 - 0.5
Herbicides	2,4-D	94-75-7	8151A	5 / 40	1.4 J	3.0 J	1.3 - 14	3.8 - 41	ug/kg	SED-038-SIV SED-030-SIV	0 - 0.5 0 0.5
Herbicides	2,4 DB	94-82-6	8151A	4 / 40	2.3 J	14	0.66 - 30	1.8 - 30	ug/kg	SED-023-SIV	0 - 0.5
Pesticides	Toxaphene	8001-35-2	8081A	0 / 40	-	-	2.3 - 24	7 - 71	ug/kg		
Pesticides	Heptachlor Epoxide	1024-57-3	8081A	0 / 40	-	-	0.036 - 1.2	0.17 - 1.8	ug/kg		
Pesticides	Endosulfan Sulfate	1031-07-8	8081A	1 / 40	0.49 J	0.49 J	0.07 - 0.94	0.36 - 3.7	ug/kg	SED-027-SIV	0 - 0.5
Pesticides	Mirex	2385-85-5	8081A	0 / 40	-	-	0.07 - 2.5	0.36 - 3.7	ug/kg		
Pesticides	Aldrin	309-00-2	8081A	1 / 40	0.13 J	0.13 J	0.07 - 0.71	0.17 - 1.8	ug/kg	SED-039-SIV	0 - 0.5
Pesticides	Alpha-BHC	319-84-6	8081A	4 / 40	0.066 J	1.2 J	0.036 - 0.39	0.17 - 1.9	ug/kg	SED-011-SIV	0 - 0.5
Pesticides	Beta-BHC	319-85-7	8081A	2 / 40	0.35 J	0.54	0.064 - 0.69	0.17 - 1.9	ug/kg	SED-030-SIV	0 - 0.5
Pesticides	Delta-BHC	319-86-8	8081A	17 / 40	0.071 J	2.6 J	0.038 - 2.4	0.17 - 2.4	ug/kg	SED-022-SIV	0 - 0.5
Pesticides	Endosulfan II	33213-65-9	8081A	0 / 40	-	-	0.07 - 2.1	0.36 - 3.7	ug/kg		
Pesticides	4,4'-DDT	50-29-3	8081A	10 / 40	0.37 J	11	0.07 - 32	0.36 - 32	ug/kg	SED-003-SIV	0 - 0.5
Pesticides	Endrin Ketone	53494-70-5	8081A	0 / 40	-	-	0.07 - 0.71	0.36 - 3.7	ug/kg		
Pesticides	Chlordane	57-74-9	8081A	0 / 40	-	-	0.84 - 22	3.6 - 37	ug/kg		
Pesticides	Gamma-BHC (Lindane)	58-89-9	8081A	5 / 40	0.058 J	2.7 J	0.036 - 2.3	0.17 - 2.3	ug/kg	SED-022-SIV	0 - 0.5
Pesticides	Dieldrin	60-57-1	8081A	1 / 40	0.12 J	0.12 J	0.07 - 1.6	0.33 - 3.7	ug/kg	SED-012-SIV	0 - 0.5
Pesticides	Endrin	72-20-8	8081A	1 / 40	1.2 J	1.2 J	0.07 - 0.98	0.36 - 3.7	ug/kg	SED-003-SIV	0 - 0.5
Pesticides	Methoxychlor	72-43-5	8081A	0 / 40	-	-	0.36 - 8.6	1.7 - 18	ug/kg		
Pesticides	4,4'-DDD	72-54-8	8081A	1 / 40	0.35 J	0.35 J	0.07 - 19	0.36 - 19	ug/kg	SED-012-SIV	0 - 0.5
Pesticides	4,4'-DDE	72-55-9	8081A	6 / 40	0.18 J	2.7 J	0.07 - 2.8	0.36 - 3.7	ug/kg	SED-037-SIV	0 - 0.5
Pesticides	Endrin Aldehyde	7421-93-4	8081A	2 / 40	0.40	1.8 J	0.07 - 5.9	0.36 - 5.9	ug/kg	SED-022-SIV	0 - 0.5
Pesticides	Heptachlor	76-44-8	8081A	5 / 40	0.11 J	0.56 J	0.063 - 0.65	0.17 - 1.8	ug/kg	SED-023-SIV	0 - 0.5
Pesticides	Endosulfan I	959-98-8	8081A	1 / 40	0.13 J	0.13 J	0.046 - 0.48	0.17 - 1.8	ug/kg	SED-011-SIV	0 - 0.5
Pesticides	Tetrabutyltin	1461-25-2	NOAA S&T	0 / 1	3.2 U	3.2 U	0.84 - 0.84	3.2 - 3.2	ug/kg		
Pesticides	Tributyltin	688-73-3	NOAA S&T	0 / 1	2.9 U	2.9 U	1.3 - 1.3	2.9 - 2.9	ug/kg		
Pesticides	Dibutyltin	77-58-7	NOAA S&T	0 / 1	2.5 U	2.5 U	0.76 - 0.76	2.5 - 2.5	ug/kg		
Pesticides	Monobutyltin	78763-54-9	NOAA S&T	0 / 1	9.5 UJ	9.5 UJ	9.5 - 9.5	9.5 - 9.5	ug/kg		

Table 3-1
Summary of Analytical Results for Chemical - Validated Data
Drainage Sediments

Group	Chemical	CAS No	Analytic Method	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Depth of Maximum Concentration (ft)
Semivolatiles	N-Nitrosodimethylamine	62-75-9	8270C SIM	0 / 40	-		0.7 - 7.4	1.8 - 18	ug/kg		
Semivolatiles	2,4-Dinitrotoluene	121-14-2	8270C	0 / 40	-	-	35 - 50	180 - 250	ug/kg		
Semivolatiles	Nitrobenzene	98-95-3	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	1,4-Dichlorobenzene	106-46-7	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	1,2,4-Trichlorobenzene	120-82-1	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	1,3-Dichlorobenzene	541-73-1	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	Hexachlorobutadiene	87-68-3	8270C	0 / 40	-	-	70 - 99	180 - 250	ug/kg		
Semivolatiles	1,2-Dichlorobenzene	95-50-1	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	4-Nitroaniline	100-01-6	8270C	0 / 40	-	-	70 - 99	180 - 250	ug/kg		
Semivolatiles	4-Nitrophenol	100-02-7	8270C	0 / 40	-	-	180 - 250	530 - 740	ug/kg		
Semivolatiles	4-Bromophenyl Phenyl Ether	101-55-3	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	2,4-Dimethylphenol	105-67-9	8270C	0 / 40	-	-	35 - 50	180 - 250	ug/kg		
Semivolatiles	4-Methylphenol	106-44-5	8270C	0 / 40	-	-	35 - 50	180 - 250	ug/kg		
Semivolatiles	4-Chloroaniline	106-47-8	8270C	0 / 40	-	-	70 - 99	180 - 250	ug/kg		
Semivolatiles	3,5-Dimethylphenol	108-68-9	8270C	0 / 40	-	-	35 - 50	180 - 250	ug/kg		
Semivolatiles	Phenol	108-95-2	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	Bis(2-Chloroethyl) ether	111-44-4	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	Bis(2-Chloroethoxy) methane	111-91-1	8270C	0 / 40	-		18 - 25	180 - 250	ug/kg		
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C	19 / 24	19 J	130 J	18 - 24	350 - 470	ug/kg	SED-010-SIV	0 - 0.5
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C SIM	13 / 16	8.2 J	69	6.4 - 8.9	19 - 27	ug/kg	SED-008-SIV	0 - 0.5
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C	0 / 2	-	-	19 - 22	190 - 220	ug/kg		
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C SIM	3 / 38	8.6 J	97 J	6.3 - 66	19 - 200	ug/kg	SED-029-SIV	0 - 0.5
Semivolatiles	Hexachlorobenzene	118-74-1	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	Anthracene	120-12-7	8270C	1 / 1	37 J	37 J	19 - 19	190 - 190	ug/kg	SED-032-SIV	0 - 0.5
Semivolatiles	Anthracene	120-12-7	8270C SIM	16 / 39	0.38 J	6.0 J	0.35 - 3.7	1.8 - 18	ug/kg	SED-019-SIV	0 - 0.5
Semivolatiles	2,4-Dichlorophenol	120-83-2	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	1,2-Diphenylhydrazine	122-66-7	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	Pyrene	129-00-0	8270C	3 / 3	34 J	540	19 - 22	190 - 220	ug/kg	SED-032-SIV	0 - 0.5
Semivolatiles	Pyrene	129-00-0	8270C SIM	31 / 37	0.95 J	32	0.7 - 7.4	1.8 - 18	ug/kg	SED-029-SIV	0 - 0.5
Semivolatiles	Dimethylphthalate	131-11-3	8270C	0 / 3	-	-	18 - 22	180 - 220	ug/kg		
Semivolatiles	Dimethylphthalate	131-11-3	8270C SIM	0 / 37	-	-	6.3 - 8.9	19 - 27	ug/kg		
Semivolatiles	Dibenzofuran	132-64-9	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	Benzo(g,h,i)perylene	191-24-2	8270C	2 / 2	22 J	500	19 - 20	190 - 200	ug/kg	SED-032-SIV	0 - 0.5
Semivolatiles	Benzo(g,h,i)perylene	191-24-2	8270C SIM	20 / 38	0.77 J	12	0.7 - 7.4	1.8 - 18	ug/kg	SED-019-SIV	0 - 0.5
Semivolatiles	Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C	1 / 1	420	420	19 - 19	190 - 190	ug/kg	SED-032-SIV	0 - 0.5
Semivolatiles	Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C SIM	17 / 39	0.91 J	10	0.7 - 7.4	1.8 - 18	ug/kg	SED-033-SIV	0 - 0.5
Semivolatiles	Benzo(b)fluoranthene	205-99-2	8270C	1 / 1	680	680	19 - 19	190 - 190	ug/kg	SED-032-SIV	0 - 0.5
Semivolatiles	Benzo(b)fluoranthene	205-99-2	8270C SIM	35 / 39	0.94 J	49	0.7 - 7.4	1.8 - 18	ug/kg	SED-009-SIV	0 - 0.5
Semivolatiles	Fluoranthene	206-44-0	8270C	3 / 3	37 J	420	19 - 22	190 - 220	ug/kg	SED-032-SIV	0 - 0.5
Semivolatiles	Fluoranthene	206-44-0	8270C SIM	33 / 37	0.94 J	47	0.7 - 7.4	1.8 - 18	ug/kg	SED-029-SIV	0 - 0.5
Semivolatiles	Benzo(k)fluoranthene	207-08-9	8270C	1 / 1	280	280	19 - 19	190 - 190	ug/kg	SED-032-SIV	0 - 0.5
Semivolatiles	Benzo(k)fluoranthene	207-08-9	8270C SIM	23 / 39	0.73 J	14	0.7 - 7.4	1.8 - 18	ug/kg	SED-033-SIV	0 - 0.5
Semivolatiles	Acenaphthylene	208-96-8	8270C SIM	6 / 40	0.46 J	0.72 J	0.35 - 3.7	1.8 - 18	ug/kg	SED-022-SIV	0 - 0.5
Semivolatiles	Chrysene	218-01-9	8270C	2 / 2	37 J	490	19 - 22	190 - 220	ug/kg	SED-032-SIV	0 - 0.5
Semivolatiles	Chrysene	218-01-9	8270C SIM	36 / 38	0.62 J	29	0.35 - 3.7	1.8 - 18	ug/kg	SED-007-SIV	0 - 0.6
Semivolatiles	bis(2-Chloroisopropyl) ether	39638-32-9	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	Benzo(a)pyrene	50-32-8	8270C	1 / 1	650	650	19 - 19	190 - 190	ug/kg	SED-032-SIV	0 - 0.5
Semivolatiles	Benzo(a)pyrene	50-32-8	8270C SIM	26 / 39	0.79 J	25	0.7 - 7.4	1.8 - 18	ug/kg	SED-033-SIV	0 - 0.5
Semivolatiles	2,4-Dinitrophenol	51-28-5	8270C	0 / 40	-	-	380 - 990	1200 - 3000	ug/kg		
Semivolatiles	4,6-Dinitro-2-Methylphenol	534-52-1	8270C	0 / 40	-	-	180 - 250	530 - 740	ug/kg		
Semivolatiles	Dibenzo(a,h)anthracene	53-70-3	8270C	1 / 1	120 J	120 J	19 - 19	190 - 190	ug/kg	SED-032-SIV	0 - 0.5
Semivolatiles	Dibenzo(a,h)anthracene	53-70-3	8270C SIM	2 / 39	3.2	5.7 J	0.7 - 7.4	1.8 - 18	ug/kg	SED-007-SIV	0 - 0.6
Semivolatiles	Benzo(a)anthracene	56-55-3	8270C	2 / 2	24 J	400	19 - 22	190 - 220	ug/kg	SED-032-SIV	0 - 0.5

Table 3-1
Summary of Analytical Results for Chemical - Validated Data
Drainage Sediments

Group	Chemical	CAS No	Analytic Method	Detection Frequency	Minimum Concentration	Maximum Concentration	Range of Method Detection Limit	Range of Method Reporting Limit	Unit	Location of Maximum Concentration	Depth of Maximum Concentration (ft)
Semivolatiles	Benzo(a)anthracene	56-55-3	8270C SIM	20 / 38	0.84 J	15	0.7 - 7.4	1.8 - 18	ug/kg	SED-033-SIV	0 - 0.5
Semivolatiles	4-Chloro-3-Methylphenol	59-50-7	8270C	0 / 40	-	-	35 - 50	180 - 250	ug/kg		
Semivolatiles	N-Nitroso-Di-N-Propylamine	621-64-7	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	Aniline	62-53-3	8270C	0 / 40	-	-	180 - 250	530 - 740	ug/kg		
Semivolatiles	Benzoic Acid	65-85-0	8270C	0 / 40	-	-	180 - 250	530 - 740	ug/kg		
Semivolatiles	Hexachloroethane	67-72-1	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	4-Chlorophenyl Phenylether	7005-72-3	8270C	0 / 40	-	-	35 - 50	180 - 250	ug/kg		
Semivolatiles	Hexachlorocyclopentadiene	77-47-4	8270C	0 / 40	-	-	180 - 250	530 - 740	ug/kg		
Semivolatiles	Isophorone	78-59-1	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	Acenaphthene	83-32-9	8270C	1 / 1	43 J	43 J	19 - 19	190 - 190	ug/kg	SED-032-SIV	0 - 0.5
Semivolatiles	Acenaphthene	83-32-9	8270C SIM	0 / 39	-	-	0.7 - 7.4	1.8 - 18	ug/kg		
Semivolatiles	Diethylphthalate	84-66-2	8270C	0 / 3	-	-	18 - 22	180 - 220	ug/kg		
Semivolatiles	Diethylphthalate	84-66-2	8270C SIM	0 / 37	-	-	6.3 - 8.9	19 - 27	ug/kg		
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C	1 / 3	26 J	26 J	18 - 22	180 - 220	ug/kg	SED-019-SIV	0 - 0.5
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C SIM	4 / 37	7.3 J	15 J	6.3 - 8.9	19 - 27	ug/kg	SED-038-SIV	0 - 0.5
Semivolatiles	Phenanthrene	85-01-8	8270C	2 / 2	25 J	110 J	19 - 19	190 - 190	ug/kg	SED-032-SIV	0 - 0.5
Semivolatiles	Phenanthrene	85-01-8	8270C SIM	34 / 38	0.89 J	22	0.7 - 7.4	1.8 - 18	ug/kg	SED-019-SIV SED-029-SIV	0 - 0.5 0 0.5
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C	4 / 5	31 J	56 J	18 - 22	180 - 220	ug/kg	SED-036-SIV	0 - 0.5
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C SIM	12 / 35	7.1 J	17 J	6.3 - 8.9	19 - 27	ug/kg	SED-003-SIV SED-039-SIV	0 - 0.5 0 0.5
Semivolatiles	N-Nitrosodiphenylamine	86-30-6	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	Fluorene	86-73-7	8270C SIM	11 / 40	1.9 J	11	0.7 - 7.4	1.8 - 18	ug/kg	SED-012-SIV	0 - 0.5
Semivolatiles	Carbazole	86-74-8	8270C	1 / 40	24 J	24 J	18 - 25	180 - 250	ug/kg	SED-032-SIV	0 - 0.5
Semivolatiles	Pentachlorophenol	87-86-5	8270C	0 / 40	-	-	180 - 250	530 - 740	ug/kg		
Semivolatiles	2,4,6-Trichlorophenol	88-06-2	8270C	0 / 40	-	-	35 - 50	180 - 250	ug/kg		
Semivolatiles	2-Nitroaniline	88-74-4	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	2-Nitrophenol	88-75-5	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	1-Methylnaphthalene	90-12-0	8270C SIM	8 / 40	J	2.6	0.7 - 7.4	1.8 - 18	ug/kg	SED-037-SIV	0 - 0.5
Semivolatiles	Naphthalene	91-20-3	8270C SIM	27 / 40	0.83 J	9.0 J	0.7 - 7.4	1.8 - 18	ug/kg	SED-019-SIV	0 - 0.5
Semivolatiles	2-Methylnaphthalene	91-57-6	8270C SIM	8 / 40	0.96 J	3.1	0.7 - 7.4	1.8 - 18	ug/kg	SED-037-SIV	0 - 0.5
Semivolatiles	2-Chloronaphthalene	91-58-7	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	3,3`-Dichlorobenzidine	91-94-1	8270C	0 / 40	-	-	110 - 150	350 - 500	ug/kg		
Semivolatiles	Benzidine	92-87-5	8270C	0 / 40	-	-	1200 - 1700	3500 - 5000	ug/kg		
Semivolatiles	2-Methylphenol	95-48-7	8270C	0 / 40	-	-	35 - 50	180 - 250	ug/kg		
Semivolatiles	2-Chlorophenol	95-57-8	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		
Semivolatiles	2,4,5-Trichlorophenol	95-95-4	8270C	0 / 40	-	-	35 - 50	180 - 250	ug/kg		
Semivolatiles	3-Nitroaniline	99-09-2	8270C	0 / 40	-	-	35 - 50	180 - 250	ug/kg		
Semivolatiles	Benzyl Alcohol	100-51-6	8270C	0 / 40	-	-	180 - 250	530 - 740	ug/kg		
Semivolatiles	2,6-Dinitrotoluene	606-20-2	8270C	0 / 40	-	-	18 - 25	180 - 250	ug/kg		

Notes:
J = The associated value is an estimated quantity

Section 4
Data Usability Assessment

The purposes of the DUAR provided in Appendix C and summarized here are to: 1) describe the data validation processes performed on the data sets, and 2) determine whether the sample results meet the data quality objectives (DQOs) outlined in the *Draft Work Plan/Field Sampling and Analysis Plan Co-Located Chemical Sediment Sampling at Area IV Santa Susana Field Laboratory, Ventura County, California* (CDM 2010).

4.1 Usability Summary

For this drainage sediment data usability assessment, 23 data sets were reviewed. A data set consists of 20 or fewer samples grouped together by analytical method for analyses depending on the time and date the samples were received by the laboratory. A data set is called a sample delivery group, or SDG. The analyses performed are discussed in Section 2.4.2.

Samples were collected and analyzed in accordance with the WP/FSAP (CDM 2010). Deviations from what was prescribed during the field investigation are discussed in Section 2.6.

The data generated for the drainage sediment samples together with the data validation qualifiers added are usable as reported, with the exception of 117 individual analyte results (1.73 percent of all analytes) that were rejected (2 individual metal results, 79 individual pesticide results, and 36 individual herbicide results). These rejected data do not impact project objectives and goals. Specific details are provided in the validation reports in Appendix C and in Section 4.9.

4.2 Data Validation Procedures

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

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

Table 4-1 shows all SDGs that include the drainage sediment samples and those SDGs that were validated as Level III or Level IV. Some SDGs contain samples from other subareas[1], but all samples in an SDG were validated together.

Table 4-1 Sample Delivery Groups and Validation Levels

Sample Delivery Group	Level of Validation Performed	CDM Review
DE036	Level III	
DE037	Level III	
DE038	Level III	YES
DE039	Level III	
DE040	Level III	
DE042	Level IV	
DE045	Level III	
DE046	Level IV	YES
DE050	Level III	
DE051	Level III	
DE060	Level III	
DE159	Level III	
DX020	Level III	YES
DX021	Level III	
DX022	Level III	
DX023	Level III	
DX024	Level III	
DX026	Level III	
DX029	Level IV	YES
DX033	Level IV	
DX034	Level III	
DX038	Level III	
DX087	Level III	
1105316	Level IV	Completed by CDM
5311	Level IV	Completed by CDM

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

4.3 Quality Assurance Objectives

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

[1] During the drainage sediment sampling, EPA was also collecting soil samples in subareas 5B and 5C. Therefore some sample delivery groups contain results for 5C, 5B, and the drainage sediment samples.

A review of the collected data is necessary to determine if data measurement objectives established in the WP/FSAP (CDM 2010) have been met. The following data measurement objectives were considered:

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

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

4.4 Summary of Field and Laboratory QA Activities

CDM completed sampling activities in accordance with the approved WP/FSAP (CDM 2010). A total of 40 drainage sediment locations were sampled and 42 samples were analyzed (includes field duplicates). Table 2-1 provides a summary of the samples collected and the laboratory analyses requested.

An index of samples associated with each SDG is presented at the beginning of Appendix C. The WP/FSAP (CDM 2010) defined the procedures to be followed and the data quality requirements for the field sampling.

4.5 Field Quality Assurance/Quality Control

The field QC samples were collected at a frequency of 1 per 20 samples (5 percent) for MS/MSDs and field duplicates. Two MS/MSD samples and two field duplicate samples were collected by CDM and analyzed by LLI. MS/MSD and field duplicate samples met the frequency requirements detailed in the FSAP (CDM 2010). A third field duplicate and MS/MSD sample was collected for methyl mercury and organotin analyses only.

As discussed in Section 2.3.2, one equipment rinsate blank sample was collected. The equipment rinsate blank results are presented in Appendix C and a summary of the detected results is presented in Table 4-2. One field blank sample was collected for organotins and methyl mercury analyses only. The results for this sample (presented in Appendix C) are nondetect.

Table 4-2. Equipment Blank for Drainage Sediment Samples - Detected Results Only

EB01-SIV-121710 12/17/2010 Equipment Blank			
Analyte	**Units**	**Concentration**	**Final Qualifier**
Diethylphthalate	µg/L	0.054	J
Naphthalene	µg/L	0.051	J
OCDD	pg/L	13.7	J

Notes:
µg/L - micrograms per liter
pg/L - picograms per liter
OCDD – Octachlorodibenzodioxin

Temperature blanks were included with each shipment of samples and the laboratory received all samples within the required temperature range.

The number of field QC samples collected satisfies the minimum requirement for the drainage sediment sampling event except for the equipment blanks. This deviation is discussed in Section 2.6.

Field QA/QC objectives were attained through the use of appropriate sampling techniques and collection of the required QC samples at the required frequencies.

4.6 Laboratory Quality Assurance/Quality Control

Analytical QA/QC was assessed by laboratory QC checks, method blanks, sample custody tracking, sample preservation, adherence to holding times, laboratory control samples (LCSs), MSs, calibration recoveries, surrogates, tuning criteria, second column confirmations, internal standards, serial dilutions, laboratory duplicates, and interference check standards. The majority of the laboratory QC sample criteria met project requirements as indicated in the data validation reports in Appendix C with the appropriate qualifiers applied. One hundred and seventeen individual analyte results (1.73 percent of all the analytes) were rejected and are discussed in detail below and in Appendix C.

4.7 Data Quality Indicators

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

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

4.7.1 Precision

Precision is the measurement of the ability to obtain the same value on re-analysis of a sample. The closer the results of the measurements are to each other, the greater the

precision. Precision has nothing to do with accuracy or true values in the sample. Instead it is focused upon the random errors inherent in the analysis that stem from the measurement process and are compounded by the sample vagaries. Precision is measured by analyzing two portions of the sample (sample and duplicate) and then comparing the results. This comparison is expressed in terms of relative percent difference (RPD). RPD is calculated as the difference between the two measurements divided by the average of the two measurements.

$$RPD = \left|(A-B)/\frac{A+B}{2}\right| \times 100$$

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

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

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

For the drainage sediment data set, precision was evaluated by reviewing RPD results for QC parameters consisting of MS/MSDs, LCS/LCSDs, laboratory duplicates, and field duplicates.

Laboratory RPD control limits are presented in the WP/FSAP (CDM 2010) or are laboratory specific. For laboratory duplicates, if one or both of the sample results are less than 2 times the RL, a control limit of the RL absolute value is used for comparison.

The field duplicate RPD criterion is 50 percent. Field duplicates for this project are validated following the criteria where if one result is non-detect and the other result is above the RL, the RPD result is reported at 200 percent and the field duplicate sample and parent sample results are qualified as estimated "J" or "UJ." If the field duplicate

RPD is above the 50 percent criteria (and both sample results are above the RL), the field duplicate and parent sample results for that analyte are qualified as estimated "J."

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

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

- Some of the fluoride results and various metal analyte results due to laboratory precision criteria.
- Some of the pesticide, PCBs, and herbicide analyte results due to the RPD results between the two columns being outside of criteria.

Field duplicate precision criteria required the qualification of some fluoride results, various metal analyte results, SVOC and PAH results, pesticide results, herbicide results, dioxin results, and PCB results. The associated results were qualified as estimated "J/UJ" due to field duplicate precision criteria. No results were rejected based on field duplicate precision criteria. All field duplicate RPD results are presented in Appendix C.

RPD objectives are analyte dependent. There is no discernable pattern or reason for the exceedances. No field sampling issues were identified from the RPD results that were outside of criteria and the exceedances are reasonable for this type of sampling activity. Sample results that have been qualified as estimated "J/UJ" due to precision criteria are usable for project decisions. Results that have been rejected are not usable.

4.7.2 Accuracy

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

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

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

A single detection of accuracy on a sample is not significant statistically, although many people will treat it as if it is. Statistics is the science of prediction of reality based on a limited number of observations. The more limited the number of observations, the worse the prediction is going to be. The following QC samples are used to help assess laboratory accuracy:

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

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

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

Surrogates: Surrogate recovery is a quality control measure limited to use in organics analysis. Surrogates are compounds added to every sample at the beginning of the sample preparation to monitor the success of the sample preparation on an individual sample basis. Individual compounds used as surrogates are selected based on their ability to mimic the behavior of specific target analytes held to be particularly sensitive to the sample preparation manipulations.

Interference Check Samples: Interference check sample analysis is a QC measure unique to metals analysis using inductively coupled plasma atomic emission spectrometry. When it excited each element emits light of set wavelengths. The wavelengths of light emitted from a sample can be measured to provide a qualitative and a quantitative evaluation of the elemental composition of the sample.

Calibrations and Internal Standards: Calibration/internal standards determine the establishment of a quantitative relationship between the response of the analytical procedure and the concentration of the target analyte. Calibration is the technique that performs the quantitative analysis on the sample. A necessary prerequisite is that a confident identification of the target analyte has already been established.

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

For the drainage sediment data set, accuracy was evaluated by reviewing the %R values of initial and continuing calibration (percent difference or percent drift [%D]

for organic analyses), internal standards, surrogate spikes (organic analyses only), MS/MSD, LCS/LCSD, inductively coupled plasma (ICP) interferences, and by performing serial dilution checks during metals analyses, in conjunction with method blank, calibration blank, equipment rinsate blank, and trip blank results. These QC results assist in identifying the type and magnitude of effects that contributed to the system error introduced via field and/or laboratory procedures.

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

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

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

Qualifiers are applied to applicable sample analyte results during the validation process based on laboratory accuracy results. Details of the validation and the number of analytes qualified are discussed in detail in the DUAR and laboratory validation reports in Appendix C.

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

- Some of the various metal analyte results, SVOC results, PAH results, herbicide results, and PCB results due to matrix spike accuracy criteria.
- Some of the perchlorate results, SVOC results, PAH results, pesticide results, herbicide results, monobutyltin results, and PCB results due to LCS accuracy criteria.
- Some of the pesticide results, herbicide results, and PCB results due to surrogate criteria.
- Some of the PAH results, pesticide results, and herbicide results due to calibration criteria.
- Some of the PAH analyte results due to internal standard recovery results.
- Some of the metal analyte results due to serial dilution criteria.
- Some of the dioxin analyte results based on sample concentrations being greater than the calibration range.

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

- Two antimony results based on MS accuracy criteria.
- Thirty-six individual herbicide analyte results based on LCS accuracy criteria.
- Seventy-nine individual pesticide analyte results based on surrogate recovery accuracy criteria.

Sample preservation, handling, and holding times are additional measures of accuracy of the data. Holding times are defined as the amount of time that elapses between the collection of the sample from the source in the field and the beginning of the analysis procedure. Preservation is defined as techniques used to maintain the target analytes at concentrations representative of those in the source sampled, until the sample is analyzed in the laboratory. Published holding times are viewed as valid as long as the associated preservation and container requirements have been met. All holding times, sample preservation and handling criteria were met or performed in a manner that addressed field conditions during sampling as discussed in Section 2.6.

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

4.7.3 Blank Contamination

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

In summary, some metal, SVOC, PAH, one herbicide, and dioxin were qualified as non-detect due to blank contamination criteria. Table 4-2 provides a summary of chemicals observed in equipment blank samples.

4.7.4 Representativeness, Comparability, and Sensitivity

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

4.7.4.1 Representativeness

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

Representativeness also can be monitored by reviewing field documentation and/or performing field audits. For this report, a detailed review was performed on the COC forms, laboratory sample confirmation logs, and data validation packages. Laboratory QA/QC requirements are included in the WP/FSAP (CDM 2010) and laboratory statements of work (SOWs) to ensure that the laboratory analytical results are representative of true field conditions.

Field sampling accuracy was attained through strict adherence to the approved WP/FSAP and by using approved standard operating procedures for field data collection. Based on this, the data should represent as near as possible the actual field conditions at the time of sampling.

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

4.7.4.2 Comparability

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

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

4.7.4.3 Sensitivity

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

Detection Limits

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

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

Laboratory results are reported according to rules that provide established certainty of MDLs and RLs. The result for an analyte is flagged with a "U" if that analyte was not detected, or qualified with a "J" flag if blank or other QC results fall outside the appropriate tolerance limits.

If an analyte is present at a concentration between the MDL and the RL, the analytical result is flagged with a "J," indicating an estimated quantity. Qualifying the result as an estimated concentration reflects increased uncertainty in the reported value.

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

In summary, for all analytical methods performed, some of the analytes for were qualified as estimated due to exceedences of RL criteria.

In general, for the data validated in this report, detection limits for the sample results were low enough to compare to the action levels stated in the WP/FSAP (CDM 2010). The detection limits for this project are lower than "normal" environmental data analyses. Analytical laboratory methods are being modified in order to achieve these lower RLs. Current laboratory instrumentation technology cannot achieve all of these low RLs, and thus some of the RLs are above project criteria. These results are still considered usable for project decisions.

The data validation process also determines the most valid analyte result to use for samples that are re-analyzed or diluted. These validated results are entered into the project database and used for decision-making.

4.8 Review of Selected Validation Reports

CDM performed a review of the validation reports identified in Table 4-1. This review involved comparing the validation report results against the laboratory data packages as well as the validation guidance documents. All validation report results were verified against the laboratory data packages and validation documents were followed as required.

4.9 Data Completeness

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

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

Equation A. $$\%\text{Completeness} = C_x \frac{100}{n}$$

Where:

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

Equation B. $$\%\text{Completeness} = V_x \frac{100}{n'}$$

Where:

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

The overall completeness goal for this sampling event was 90 percent for all project data.

A total of 42 drainage sediment samples including the field duplicates were collected and analyzed. As discussed in Section 2.6, one equipment rinsate blank sample was not collected based on field conditions and locations. This is not considered a data gap for this sampling event. Ninety-eight percent of the samples identified in the work plan were collected meeting the completeness goal for the number of samples collected versus number of samples planned.

The completeness goal achieved for acceptable data was 98.3 percent of the number of measurements judged to be valid versus the total number of measurements made for all drainage sediment samples analyzed. Table 4-3 shows a summary of all results that were estimated or rejected.

The following analyte results were rejected as part of the data review:

- Method 6020
  - 2 metal analyte results out of 640 results (0.31 percent)

- Method 8081A
  - 79 pesticide analyte results out of 840 results (9.49 percent)

- Method 8151A
  - 36 herbicide analyte results out of 400 results (9 percent)

Table 4-3 Summary of Data Completeness Following Data Validation

	Number of Analyte Detections Without Qualifiers	Number of Estimated Results	Number of Rejected Results	Number of Non-Detect Results	Number of Estimated Non-Detect Results	Total Analytes Detect and Non-Detect	Percent of Analyte Results Judged Valid Versus Total Analyte Results Collected
Inorganics	489	717	2	135	21	1364	99.85%
Dioxins	142	309	0	232	1	684	100%
PCBs	31	62	0	312	75	480	100%
Pesticides	11	46	79	571	133	840	90.6%
Herbicides	21	30	36	295	18	400	91%
Semivolatiles	9	37	0	1885	10	1941	100%
PAHs	162	223	0	526	28	939	100%
Completeness Total for All Drainage Sediment Samples Collected and Judged Valid							**98.27%**

The completeness goals for both the number of sediment samples collected and the number of measurements judged to be valid were met.

Sampling deviations from that described in the WP/FSAP are discussed in Section 2.6 of this report. Deviations do not impact DQOs for this sampling event. The data reported and not rejected, are suitable for their intended use for characterization of drainage sediments. The DQIs identified in the WP/FSAP (CDM 2010) met appropriate criteria. The achievement of the completeness goals for the data provides sufficient quality data for project decisions.

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

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

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

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

Section 5
References

CDM Federal Programs Corporation. 2010. *Work Plan/ Field Sampling and Analysis Plan, Co-Located Chemical Sediment Sampling at Area IV, Santa Susana Field Laboratory* December.

CH2M Hill. 2008. *Group 5 – Central Portion of Areas III and IV RCRA Facility Investigation Report Santa Susana Field Laboratory, Ventura County, California.* November.

EPA. 2008. *EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review.*

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

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

HydroGeoLogic, Inc. 2010a. *Final Phase I Field Sampling Plan for Groundwater, Surface Water, and Sediment, Area IV Radiological Study, Santa Susana Field Laboratory.* July 28.

HydroGeoLogic, Inc. 2010b. *Surface Water and Sediment Addendum to the Phase I Field Sampling Plan for Groundwater, Surface Water, and Sediment, Santa Susana Field Laboratory Site, Area IV Radiological Study.* December 6.

MEC^X. 2009. *Quality Assurance Project Plan, Santa Susana Field Laboratory, RCRA Facility Investigation, Surficial Media Operable Unit.* March.

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix A
Analytical Results Tables

Appendix B
Laboratory Reports
(On CD)

Appendix C
Data Usability Assessment Report and Data Validation Reports
(On CD)

Appendix D
Master Database Table
(On CD)

Appendix A
Analytical Results Tables
(On CD)

Appendix A1
Analytical Method, CAS Number and Chemical Name
Sediments

Analytical Method	CAS Number	Chemical Name	Alternative Chemical Name
300	16984-48-8	Fluoride	
6010B	7429-90-5	Aluminum	
6010B	7439-89-6	Iron	
6020	7439-92-1	Lead	
6010B	7439-93-2	Lithium	
6010B	7439-95-4	Magnesium	
6010B	7439-96-5	Manganese	
7471A	7439-97-6	Mercury	
6020	7439-98-7	Molybdenum	
6020	7440-02-0	Nickel	
6010B	7440-09-7	Potassium	
6020	7440-22-4	Silver	
6010B	7440-23-5	Sodium	
6010B	7440-24-6	Strontium	
6020	7440-28-0	Thallium	
6010B	7440-31-5	Tin	
6010B	7440-32-6	Titanium	
6020	7440-36-0	Antimony	
6020	7440-38-2	Arsenic	
6020	7440-41-7	Beryllium	
6020	7440-39-3	Barium	
6010B	7440-42-8	Boron	
6020	7440-43-9	Cadmium	
6020	7440-47-3	Chromium	
6020	7440-48-4	Cobalt	
6020	7440-50-8	Copper	
6020	7440-62-2	Vanadium	
6020	7440-66-6	Zinc	
6010B	7440-67-7	Zirconium	
6010B	7440-70-2	Calcium	
6010B	7723-14-0	Phosphorus	
6020	7782-49-2	Selenium	
1630M	22967-92-6	Methyl Mercury	
7199	18540-29-9	Chromium (Hexavalent Compounds)	Chromium VI
314	14797-73-0	Perchlorate	
6850	14797-73-0	Perchlorate	
8151A	120-36-5	Dichlorprop	
8151A	1918-00-9	Dicamba	
8151A	75-99-0	2,2-Dichlor-Propionic Acid	Dalapon
8151A	88-85-7	Dinitrobutyl Phenol	Dinoseb
8151A	93-65-2	Methylchlorophenoxypropionic acid	MCPP
8151A	93-72-1	2,4,5-Trichlorophenoxyacetic acid	Silvex (2,4,5-TP)
8151A	93-76-5	2,4,5-Trichlorophenoxyacetic Acid	2,4,5-T
8151A	94-74-6	2-Methyl-4-Chlorophenoxyacetic Acid	MCPA
8151A	94-75-7	Dichlorophenoxyacetic Acid	2,4-D
8151A	94-82-6	4-(2,4-dichlorophenoxy)butanoic acid	2,4 DB
8081A	8001-35-2	Chlorinated Camphene	Toxaphene
8081A	1024-57-3	Heptachlor Epoxide	
8081A	1031-07-8	Endosulfan Sulfate	

Appendix A1
Analytical Method, CAS Number and Chemical Name
Sediments

Analytical Method	CAS Number	Chemical Name	Alternative Chemical Name
8081A	2385-85-5	Mirex	
8081A	309-00-2	Aldrin	
8081A	319-84-6	Alpha-BHC	
8081A	319-85-7	Beta-BHC	
8081A	319-86-8	Delta-BHC	
8081A	33213-65-9	Endosulfan II	
8081A	50-29-3	4,4'-DDT	
8081A	53494-70-5	Endrin Ketone	
8081A	57-74-9	Chlordane	
8081A	58-89-9	Gamma-BHC (Lindane)	
8081A	60-57-1	Dieldrin	
8081A	72-20-8	Endrin	
8081A	72-43-5	Methoxychlor	
8081A	72-54-8	4,4'-DDD	
8081A	72-55-9	4,4'-DDE	
8081A	7421-93-4	Endrin Aldehyde	
8081A	76-44-8	Heptachlor	
8081A	959-98-8	Endosulfan I	
1613B	1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin	2,3,7,8-TCDD
1613B	19408-74-3	1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	1,2,3,7,8,9-HxCDD
1613B	3268-87-9	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	OCDD
1613B	35822-46-9	1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	1,2,3,4,6,7,8-HpCDD
1613B	39001-02-0	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	OCDF
1613B	39227-28-6	1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	1,2,3,4,7,8-HxCDD
1613B	40321-76-4	1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	1,2,3,7,8-PeCDD
1613B	51207-31-9	2,3,7,8-Tetrachlorodibenzofuran	2,3,7,8-TCDF
1613B	55673-89-7	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1,2,3,4,7,8,9-HpCDF
1613B	57117-31-4	2,3,4,7,8-Pentachlorodibenzofuran	2,3,4,7,8-PeCDF
1613B	57117-41-6	1,2,3,7,8-Pentachlorodibenzofuran	1,2,3,7,8-PeCDF
1613B	57117-44-9	1,2,3,6,7,8-Hexachlorodibenzofuran	1,2,3,6,7,8-HxCDF
1613B	57653-85-7	1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	1,2,3,6,7,8-HxCDD
1613B	60851-34-5	2,3,4,6,7,8-Hexachlorodibenzofuran	2,3,4,6,7,8-HxCDF
1613B	67562-39-4	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1,2,3,4,6,7,8-HpCDF
1613B	70648-26-9	1,2,3,4,7,8-Hexachlorodibenzofuran	1,2,3,4,7,8-HxCDF
1613B	72918-21-9	1,2,3,7,8,9-Hexachlorodibenzofuran	1,2,3,7,8,9-HxCDF
8082	11096-82-5	Aroclor 1260	
8082	11097-69-1	Aroclor 1254	
8082	11100-14-4	Aroclor 1268	
8082	11104-28-2	Aroclor 1221	
8082	11126-42-4	Aroclor 5460	
8082	11141-16-5	Aroclor 1232	
8082	12642-23-8	Aroclor 5442	
8082	12672-29-6	Aroclor 1248	
8082	12674-11-2	Aroclor 1016	
8082	37324-23-5	Aroclor 1262	
8082	53469-21-9	Aroclor 1242	
8082	63496-31-1	Aroclor 5432	
1625C	62-75-9	N-Nitrosodimethylamine	
8270C SIM	62-75-9	N-Nitrosodimethylamine	

Appendix A1
Analytical Method, CAS Number and Chemical Name
Sediments

Analytical Method	CAS Number	Chemical Name	Alternative Chemical Name
8270C	121-14-2	2,4-Dinitrotoluene	
8270C	98-95-3	Nitrobenzene	
8270C	106-46-7	1,4-Dichlorobenzene	
8270C	120-82-1	1,2,4-Trichlorobenzene	
8270C	541-73-1	1,3-Dichlorobenzene	
8270C	87-68-3	Hexachlorobutadiene	
8270C	95-50-1	1,2-Dichlorobenzene	
8270C	100-01-6	4-Nitroaniline	
8270C	100-02-7	4-Nitrophenol	
8270C	101-55-3	4-Bromophenyl Phenyl Ether	
8270C	105-67-9	2,4-Dimethylphenol	
8270C	106-44-5	4-Methylphenol	
8270C	106-47-8	4-Chloroaniline	
8270C	108-68-9	3,5-Dimethylphenol	
8270C	108-95-2	Phenol	
8270C	111-44-4	Bis(2-Chloroethyl) ether	
8270C	111-91-1	Bis(2-Chloroethoxy) methane	
8270C	117-81-7	Bis(2-Ethylhexyl) phthalate	
8270C SIM	117-81-7	Bis(2-Ethylhexyl) phthalate	
8270C	117-84-0	Di-N-Octyl Phthalate	
8270C SIM	117-84-0	Di-N-Octyl Phthalate	
8270C	118-74-1	Hexachlorobenzene	
8270C SIM	120-12-7	Anthracene	
8270C	120-83-2	2,4-Dichlorophenol	
8270C	122-66-7	1,2-Diphenylhydrazine	
8270C	129-00-0	Pyrene	
8270C SIM	129-00-0	Pyrene	
8270C	131-11-3	Dimethylphthalate	
8270C SIM	131-11-3	Dimethylphthalate	
8270C	132-64-9	Dibenzofuran	
8270C	191-24-2	Benzo(g,h,i)perylene	
8270C SIM	191-24-2	Benzo(g,h,i)perylene	
8270C	193-39-5	Indeno(1,2,3-Cd)Pyrene	
8270C SIM	193-39-5	Indeno(1,2,3-Cd)Pyrene	
8270C	205-99-2	Benzo(b)fluoranthene	
8270C SIM	205-99-2	Benzo(b)fluoranthene	
8270C	206-44-0	Fluoranthene	
8270C SIM	206-44-0	Fluoranthene	
8270C	207-08-9	Benzo(k)fluoranthene	
8270C SIM	207-08-9	Benzo(k)fluoranthene	
8270C SIM	208-96-8	Acenaphthylene	
8270C	218-01-9	Chrysene	
8270C SIM	218-01-9	Chrysene	
8270C	39638-32-9	bis(2-Chloroisopropyl) ether	
8270C	50-32-8	Benzo(a)pyrene	
8270C SIM	50-32-8	Benzo(a)pyrene	
8270C	51-28-5	2,4-Dinitrophenol	
8270C	534-52-1	4,6-Dinitro-2-Methylphenol	
8270C	53-70-3	Dibenzo(a,h)anthracene	

Appendix A1
Analytical Method, CAS Number and Chemical Name
Sediments

Analytical Method	CAS Number	Chemical Name	Alternative Chemical Name
8270C SIM	53-70-3	Dibenzo(a,h)anthracene	
8270C	56-55-3	Benzo(a)anthracene	
8270C SIM	56-55-3	Benzo(a)anthracene	
8270C	59-50-7	4-Chloro-3-Methylphenol	
8270C	621-64-7	N-Nitroso-Di-N-Propylamine	
8270C	62-53-3	Aniline	
8270C	65-85-0	Benzoic Acid	
8270C	67-72-1	Hexachloroethane	
8270C	7005-72-3	4-Chlorophenyl Phenylether	
8270C	77-47-4	Hexachlorocyclopentadiene	
8270C	78-59-1	Isophorone	
8270C SIM	83-32-9	Acenaphthene	
8270C	84-66-2	Diethylphthalate	
8270C SIM	84-66-2	Diethylphthalate	
8270C	84-74-2	Di-N-Butylphthalate	
8270C SIM	84-74-2	Di-N-Butylphthalate	
8270C	85-01-8	Phenanthrene	
8270C SIM	85-01-8	Phenanthrene	
8270C	85-68-7	Butylbenzylphthalate	
8270C SIM	85-68-7	Butylbenzylphthalate	
8270C	86-30-6	N-Nitrosodiphenylamine	
8270C SIM	86-73-7	Fluorene	
8270C	86-74-8	Carbazole	
8270C	87-86-5	Pentachlorophenol	
8270C	88-06-2	2,4,6-Trichlorophenol	
8270C	88-74-4	2-Nitroaniline	
8270C	88-75-5	2-Nitrophenol	
8270C	90-12-0	1-Methylnaphthalene	
8270C SIM	90-12-0	1-Methylnaphthalene	
8270C	91-20-3	Naphthalene	
8270C SIM	91-20-3	Naphthalene	
8270C	91-57-6	2-Methylnaphthalene	
8270C SIM	91-57-6	2-Methylnaphthalene	
8270C	91-58-7	2-Chloronaphthalene	
8270C	91-94-1	3,3`-Dichlorobenzidine	
8270C	92-87-5	Benzidine	
8270C	95-48-7	2-Methylphenol	
8270C	95-57-8	2-Chlorophenol	
8270C	95-95-4	2,4,5-Trichlorophenol	
8270C	99-09-2	3-Nitroaniline	
8270C	100-51-6	Benzyl Alcohol	
8270C	606-20-2	2,6-Dinitrotoluene	
NOAA S&T	1461-25-2	Tetrabutyltin	
NOAA S&T	688-73-3	Tributyltin	
NOAA S&T	77-58-7	Dibutyltin	
NOAA S&T	78763-54-9	Monobutyltn	

Appendix A2
Metals and Inorganics - Validated Data
Sediments

Sample Name		SED-001-SIV-SD-0.0-0.5	SED-002-SIV-SD-0.0-0.5	SED-003-SIV-SD-0.0-0.5	SED-004-SIV-SD-0.0-0.5	SED-005-SIV-SD-0.0-0.5	SED-006-SIV-SD-0.0-0.5	SED-007-SIV-SD-0.0-0.6	SED-008-SIV-SD-0.0-0.5	SED-009-SIV-SD-0.0-0.5	SED-010-SIV-SD-0.0-0.5	SED-011-SIV-SD-0.0-0.5	SED-012-SIV-SD-0.0-0.5	SED-013-SIV-SD-0.0-0.5	SED-014-SIV-SD-0.0-0.5	SED-015-SIV-SD-0.0-0.5
Sample Date		12/17/2010	12/21/2010	12/20/2010	12/17/2010	12/20/2010	12/17/2010	12/20/2010	12/20/2010	01/13/2011	12/22/2010	12/16/2010	12/17/2010	12/16/2010	12/17/2010	12/21/2010
SDG		DE045	DE050	DX029	DE045	DX029	DE045	DX029	DX029	DE060	DE051	DX026	DE045	DX026	DE045	DE050
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Fluoride	mg/kg	1.2	1.1 J	2.9 J	1.3	2.6 J	1.2 U	1.9 J	2.7 J	1.8	1.4	2	1.7	2.6	1.1 J	1.2 J
Aluminum	mg/kg	17400	14600	10400	27300	15200	30200	11300	12800	10700	8910	11500	7920	19000	11900	10200
Iron	mg/kg	20400	22100	14800	32800	19200	30300	17200	19500	19800	15400 J	18200	14400	27700	18700	15300
Lead	mg/kg	15.3 J	10 J	11 J	12.9 J	16.5 J	31.1 J	11.7 J	16.9 J	12.8	8.58	13.8 J	9.9 J	19.8 J	12.2 J	13.2 J
Lithium	mg/kg	23.8	29.2	20.3 J	34.3	22.6 J	26.5	18.2 J	23.9 J	26.2	23.2	23.4 J	17.6	32.2 J	21.1	21.2
Magnesium	mg/kg	4420	6260	3220	9100	4420	6430	3910	4440	5720	3720 J	4210	3640	6690	5030	3790
Manganese	mg/kg	440	332	190	398	287	454	277	293	306	301	330	209	524	274	257
Mercury	mg/kg	0.927	0.114 U	0.0761 J	0.0343 J	0.0309 J	0.0233 J	0.0257 J	0.106 J	0.022 J	0.0093 J	0.105 U	0.0078 J	0.0198 J	0.0209 J	0.0053 J
Methyl Mercury	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Molybdenum	mg/kg	1.05 J	0.457 J	0.396 J	0.614 J	0.819 J	0.893 J	0.495 J	0.508 J	0.435	0.276	0.641 J	0.478 J	0.992 J	1.09 J	0.513 J
Nickel	mg/kg	16 J	12.1 J	11.2 J	21.8 J	17.6 J	21.8 J	12.8 J	12.3 J	14.7	8.35	12.9 J	9.76 J	21.7 J	14.4 J	12.7 J
Potassium	mg/kg	4070	3940	2930	6980	3360	5400	2880	3590	3270	2890 J	3370 J	2450	4530 J	3040	3150
Silver	mg/kg	0.0983 J	0.0286 J	0.0333 J	0.0368 J	0.0489 J	0.0845 J	0.0542 J	0.0811 J	0.0798 J	0.0232 J	0.0437 J	0.0246 J	0.0981 J	0.035 J	0.0473 J
Sodium	mg/kg	110 J	74.9 J	99.8 J	155	75.7 J	113 J	69.5 J	82.4 J	64 J	56.7 J	75.3 J	78.1 J	112 J	101 J	72.3 J
Strontium	mg/kg	27.2	13.6	14.6 J	67.1	15.8 J	32.8	24.3 J	19.3 J	22.9	13.2 J	18.4	10.3	24.5	26.6	23.9
Thallium	mg/kg	0.335	0.296	0.291 J	0.454	0.358 J	0.449	0.234 J	0.268 J	0.323	0.247	0.368 J	0.216	0.575 J	0.307	0.29
Tin	mg/kg	11.2 U	11.4 U	12.9 U	12.4 U	12 U	12 U	11.8 U	14.2 U	2.74 J	2.4 J	10.8 U	10.6 U	11.5 U	11.6 U	12.8 U
Titanium	mg/kg	1160	1360	856	1550	1140	1460	906	1110	997	873	1080	786	1550	1070	883
Antimony	mg/kg	0.118 J	0.111 J	0.265 UJ	0.113 J	0.24 UJ	0.174 J	0.234 UJ	0.297 UJ	0.118 J	0.233 UJ	0.221 UJ	0.1 J	0.219 UJ	0.101 J	0.0859 J
Arsenic	mg/kg	7.32 J	6.18 J	8.91 J	8.81 J	5.63 J	7.45 J	4.12 J	12.9 J	37.9	9.04 J	6.56 J	5.73 J	9.74 J	5.93 J	11.6 J
Beryllium	mg/kg	0.73	0.574	0.565	0.797	0.649	0.991	0.439	0.499	0.549	0.407	0.675 J	0.405	1.06 J	0.591	0.497
Barium	mg/kg	138	104	101 J	147	113 J	184	96.6 J	89.9 J	69.6	72.5 J	119 J	65.3	180 J	117	99.4
Boron	mg/kg	8.79	4.65 J	5.57 J	15.7	4.11 J	11.3	7.37	6.76 J	6.54 U	6.51	5.55	6.39	4.43 J	8.15	5.34 J
Cadmium	mg/kg	0.457 J	0.233 J	0.164 J	0.371 J	0.224 J	0.752 J	0.305 J	0.238 J	0.211	0.152	0.279 J	0.157 J	0.423 J	0.279 J	0.191 J
Chromium	mg/kg	26.7 J	20.4 J	17.3 J	43.6 J	25.3 J	38 J	16.5 J	16.3 J	19.1	11.8 J	20.1 J	15.3 J	37.4 J	22.9 J	18.7 J
Cobalt	mg/kg	7.38 J	5.89 J	6.47 J	11.6 J	6.97 J	10.3 J	5.12 J	5.85 J	6.53	4.17 J	6.24 J	4.48 J	9.87 J	8.83 J	5.55 J
Copper	mg/kg	13.2 J	8.69 J	8.4 J	17.8 J	11 J	17.7 J	10.8 J	10.2 J	11.2	5.42 J	9.7 J	7.46 J	15.4 J	10.8 J	9.12 J
Vanadium	mg/kg	48.4 J	42.4 J	36.5 J	83.9 J	43.7 J	68.9 J	32.3 J	31.2 J	32.4	23.9 J	41.7 J	32.1 J	69 J	47.2 J	36.1 J
Zinc	mg/kg	88.8	70.9	71.6 J	113	82.4 J	186	111 J	67.9 J	57.9	58	91.8 J	64.1	141 J	84.4	73.3
Zirconium	mg/kg	4.21 J	4.42 J	1.21 J	6.96	6 UJ	6.11	1.02 J	1.44 J	6.54 U	5.93 U	5.4 U	1.57 J	5.75 U	2.4 J	2.32 J
Calcium	mg/kg	5250	2940	2810	31400	2560	4880	3980	3610	8140	4260 J	3840	3220	4700	6160	5080
Phosphorus	mg/kg	423	501	378	641	451	526	427	415	474	378 J	457 J	327	449 J	441	399
Selenium	mg/kg	0.23 J	0.153 J	0.155 J	0.517	0.199 J	0.193 J	0.168 J	0.199 J	0.179 J	0.465 U	0.148 J	0.172 J	0.207 J	0.239 J	0.188 J
Chromium VI	mg/kg	1.1 U	0.25 J	1.4 U	0.37 J	0.6 J	0.35 J	1.2 U	1.5 U	1.3 U	1.2 U	0.6 J	0.56 J	0.95 J	0.32 J	1.3 U
Perchlorate (314.0)	ug/kg	34.1 U	35.9 U	40.6 U	37.1 U	37.1 U	37.5 U	36.5 U	29.4 J	39.2 U	36.6 U	33.1 U	31.8 U	34.5 U	35.3 U	39.1 U
Perchlorate (6850)	ug/kg	--	--	--	--	--	--	--	--	--	--	5.5 U	--	--	--	--
Percent Moisture	%	12.1	16.4	26.1	19.2	19.1	19.9	17.8	32.7	23.5	18.1	9.3	5.8	13	15	23.2
Tetrabutyltin	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tributyltin	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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

Appendix A2
Metals and Inorganics - Validated Data
Sediments

Sample Name		SED-001-SIV-SD-0.0-0.5	SED-002-SIV-SD-0.0-0.5	SED-003-SIV-SD-0.0-0.5	SED-004-SIV-SD-0.0-0.5	SED-005-SIV-SD-0.0-0.5	SED-006-SIV-SD-0.0-0.5	SED-007-SIV-SD-0.0-0.6	SED-008-SIV-SD-0.0-0.5	SED-009-SIV-SD-0.0-0.5	SED-010-SIV-SD-0.0-0.5	SED-011-SIV-SD-0.0-0.5	SED-012-SIV-SD-0.0-0.5	SED-013-SIV-SD-0.0-0.5	SED-014-SIV-SD-0.0-0.5	SED-015-SIV-SD-0.0-0.5
Sample Date		12/17/2010	12/21/2010	12/20/2010	12/17/2010	12/20/2010	12/17/2010	12/20/2010	12/20/2010	01/13/2011	12/22/2010	12/16/2010	12/17/2010	12/16/2010	12/17/2010	12/21/2010
SDG		DE045	DE050	DX029	DE045	DX029	DE045	DX029	DX029	DE060	DE051	DX026	DE045	DX026	DE045	DE050
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Dibutyltin	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Monobutyltn	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	pH unit	7.16	6.51	7.06	7.88	6.64	6.29	7.88	6.59	7.15	7.98	7.19	7.64	7.32	7.56	6.89

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

Appendix A2
Metals and Inorganics - Validated Data
Sediments

Sample Name		SED-016-SIV-SD-0.0-0.5	SED-017-SIV-SD-0.0-0.5	SED-018-SIV-SD-0.0-0.5	SED-019-SIV-SD-0.0-0.5	SED-020-SIV-SD-0.0-0.5	SED-021-SIV-SD-0.0-0.5	SED-022-SIV-SD-0.0-0.5	SED-023-SIV-SD-0.0-0.5	SED-024-SIV-SD-0.0-0.5	SED-025-SIV-SD-0.0-0.5	SED-026-SIV-SD-0.0-0.5	SED-027-SIV-SD-0.0-0.5	SED-028-SIV-SD-0.0-0.5	SED-029-SIV-SD-0.0-0.5	SED-030-SIV-SD-0.0-0.5
Sample Date		12/15/2010	12/16/2010	12/15/2010	12/16/2010	12/16/2010	12/15/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	01/13/2011	12/13/2010	12/13/2010
SDG		DE040	DX026	DE040	DX026	DX026	DE040	DE039	DE039	DE039	DE038	DE039	DE039	DE060	DE036	DE036
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Fluoride	mg/kg	2	1.1	1.3	1.4	1.1	1.1 U	1.1	1.1 U	1.3	1.5	1.7 J	1.1 J	2 J	1.1 U	1.2 U
Aluminum	mg/kg	13900	12100	14800	16900	9110	9560	10800	10800	11500	11900	15500	12500	9630	10400	17700
Iron	mg/kg	19300 J	17500	20100 J	25200	14100	16900 J	19400	19900	22600	19900	22200	21200	18800	16900	26600
Lead	mg/kg	6 J	29.7 J	7.2 J	54.2 J	12.2 J	5.31 J	10.5 J	14.2 J	16.7 J	14	19.5 J	16.2 J	6.77	50.6 J	19.8 J
Lithium	mg/kg	22 J	22.2 J	27.1 J	26.8 J	22.5 J	19.8 J	24.1 J	22.7 J	24.5 J	22.2	25.7 J	24.6 J	22.6	18.5	28.8
Magnesium	mg/kg	4220 J	4030	4410 J	4990	3380	3980 J	4750	5070	5470	5230 J	4510	5510	4850	4470	5770
Manganese	mg/kg	260 J	270	306 J	269	206	239 J	293	297	309	311 J	340	308	246	255	399
Mercury	mg/kg	0.0469 J	0.0741 J	0.0097 J	0.574	0.0051 J	0.101 U	0.022 J	0.0082 J	0.0121 J	0.0102 J	0.614	0.0513 J	0.0904 J	0.038 J	0.0222 J
Methyl Mercury	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Molybdenum	mg/kg	0.377	0.865 J	0.468	3.69 J	0.497 J	0.222	0.611 J	0.678 J	0.57 J	0.508	0.94 J	0.731 J	0.291	0.694 J	0.876 J
Nickel	mg/kg	10.3 J	15.7 J	9.7 J	23.5 J	11.1 J	6.99 J	12.6 J	14 J	14.2 J	15.3	15 J	15.8 J	9.52	15.1 J	22.2 J
Potassium	mg/kg	2780 J	3590 J	3880 J	3540 J	2480 J	2920 J	3120 J	3290 J	3150 J	3320 J	3830 J	3150 J	2750	2610	5000
Silver	mg/kg	0.0265 J	0.141 J	0.0255 J	0.267 J	0.0561 J	0.017 J	0.0842 J	0.0467 J	0.06 J	0.04 J	0.575 J	0.146 J	0.037 J	0.147 J	0.0806 J
Sodium	mg/kg	89.4 J	79.4 J	71.2 J	136	60.8 J	63.5 J	79.9 J	67.3 J	68.9 J	67.1 J	112 J	86.1 J	65.7 J	86.8 J	78.9 J
Strontium	mg/kg	14 J	23.6	14.8 J	26.2	12.8	7.16 J	16.3	15.5	15.2	17.9	20.6	18	12	45.6	29.1
Thallium	mg/kg	0.214	0.387 J	0.234	0.505 J	0.284 J	0.156	0.377 J	0.357 J	0.3 J	0.24	0.465 J	0.347 J	0.191	0.188	0.394
Tin	mg/kg	11.2 U	11.1 U	11 U	13 U	10.7 U	10.3 U	10.6 U	10.9 U	11.2 U	10.8 U	11.5 U	11.6 U	2.53 J	10.6 U	11.5 U
Titanium	mg/kg	1270	1080	1260	1270	868	1130	1200	1250	1350	1250 J	1290	1250	1070	1020	1460
Antimony	mg/kg	0.219 UJ	0.222 UJ	0.22 UJ	0.931 J	0.209 UJ	0.203 UJ	0.246 U	0.235 U	0.223 U	0.136 J	0.23 U	0.227 U	0.278 U	0.191 J	0.115 J
Arsenic	mg/kg	4.07 J	7.45 J	4.12 J	11.1 J	4.71 J	2.43 J	5.23 J	6.07 J	4.96 J	4.21 J	6.61 J	6.17 J	2.87	6.15 J	7.83 J
Beryllium	mg/kg	0.468	0.735 J	0.486	1.07 J	0.548 J	0.274	0.438 J	0.472 J	0.455 J	0.488	0.666 J	0.5 J	0.365	0.463 J	0.785 J
Barium	mg/kg	69.7 J	136 J	80.1 J	183 J	95.9 J	62.3 J	110 J	122 J	99.6 J	118 J	150 J	126 J	64.4	100 J	202 J
Boron	mg/kg	4.3 J	5.92	5.74	6.31 J	3.88 J	3.56 J	4.54 J	4.1 J	3.73 J	9.33	4.12 J	4.15 J	6.88 U	4.76 J	7.59
Cadmium	mg/kg	0.154	0.743 J	0.166	2.23 J	0.311 J	0.08 J	0.358 UJ	0.216 UJ	0.251 UJ	0.202	0.26 UJ	0.259 UJ	0.208	0.902 J	0.461 J
Chromium	mg/kg	17.9 J	30.3 J	15.9 J	40.2 J	19 J	12.5 J	22.4 J	23.2 J	21.8 J	24.1	24.3 J	26.8 J	15.9	23 J	33.4 J
Cobalt	mg/kg	4.65 J	7.3 J	4.39 J	11.2 J	5.25 J	3.62 J	8.04 J	7.05 J	7.26 J	6.33 J	7.27 J	7.14 J	5.06	6.94 J	9.86 J
Copper	mg/kg	6.7	16 J	6.16	50.5 J	8.77 J	4.44	9.68 J	10.5 J	10.3 J	10.6	11.3 J	10.6 J	6.44	17.8 J	18.1 J
Vanadium	mg/kg	32.7 J	52.1 J	28.6 J	68.2 J	38.2 J	26.8 J	44.8 J	48.9 J	48.1 J	47 J	46.8 J	54.9 J	32.6	41.3	56.4
Zinc	mg/kg	62.4 J	117 J	54.9 J	308 J	96.5 J	42.6 J	99 J	93.4 J	82.8 J	70.5	105 J	88.1 J	52.6	174	122
Zirconium	mg/kg	1.3 J	1.45 J	1.38 J	1.15 J	5.33 U	5.17 U	0.9 J	1.16 J	1.51 J	1.29 J	5.74 U	1.31 J	2.1 J	5.32 U	1.44 J
Calcium	mg/kg	2450 J	5400	3310 J	3050	2190	1820 J	3690	4000	3960	3940 J	3130	3280	3900	23900	4700
Phosphorus	mg/kg	299 J	475 J	394 J	707 J	310 J	324 J	390 J	405 J	434 J	470	437 J	446 J	478	403	700
Selenium	mg/kg	0.0957 J	0.12 J	0.155 J	0.202 J	0.0829 J	0.0924 J	0.184 J	0.313 J	0.206 J	0.16 J	0.177 J	0.225 J	0.124 J	0.144 J	0.209 J
Chromium VI	mg/kg	0.81 J	0.56 J	0.34 J	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.2 U	0.29 J	1.1 U	0.7 J
Perchlorate (314.0)	ug/kg	33.5 U	33.9 U	33.3 U	40.4 U	32.6 U	31.6 U	32.5 U	33.6 U	34.4 U	33.5 U	34.8 U	34.7 U	42.5 U	33.2 U	35.8 U
Perchlorate (6850)	ug/kg	--	--	--	--	5.4 U	--	--	--	5.7 U	--	--	--	--	--	--
Percent Moisture	%	10.4	11.5	9.9	25.8	8	5.1	7.6□ 7.6	10.8□ 10.8	12.8□ 12.8	10.4	13.8□ 13.8	13.6□ 13.6	29.4	9.7	16.3
Tetrabutyltin	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Tributyltin	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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

Appendix A2
Metals and Inorganics - Validated Data
Sediments

Sample Name		SED-016-SIV-SD-0.0-0.5	SED-017-SIV-SD-0.0-0.5	SED-018-SIV-SD-0.0-0.5	SED-019-SIV-SD-0.0-0.5	SED-020-SIV-SD-0.0-0.5	SED-021-SIV-SD-0.0-0.5	SED-022-SIV-SD-0.0-0.5	SED-023-SIV-SD-0.0-0.5	SED-024-SIV-SD-0.0-0.5	SED-025-SIV-SD-0.0-0.5	SED-026-SIV-SD-0.0-0.5	SED-027-SIV-SD-0.0-0.5	SED-028-SIV-SD-0.0-0.5	SED-029-SIV-SD-0.0-0.5	SED-030-SIV-SD-0.0-0.5
Sample Date		12/15/2010	12/16/2010	12/15/2010	12/16/2010	12/16/2010	12/15/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	01/13/2011	12/13/2010	12/13/2010
SDG		DE040	DX026	DE040	DX026	DX026	DE040	DE039	DE039	DE039	DE038	DE039	DE039	DE060	DE036	DE036
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Dibutyltin	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Monobutyltn	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
pH	pH unit	7	7.92	7.25	4.76	6.84	6.92	7.07	7.02	6.78	7.56	7.28	6.96	7.41	7.35	7.22

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

Appendix A2
Metals and Inorganics - Validated Data
Sediments

Sample Name		SED-031-SIV-SD-0.0-0.5	SED-032-SIV-SD-0.0-0.5	SED-033-SIV-SD-0.0-0.5	SED-034-SIV-SD-0.0-0.5	SED-035-SIV-SD-0.0-0.5	SED-036-SIV-SD-0.0-0.5	SED-037-SIV-SD-0.0-0.5	SED-038-SIV-SD-0.0-0.5	SED-039-SIV-SD-0.0-0.5	SED-040-SIV-SD-0.0-0.5
Sample Date		12/13/2010	12/13/2010	12/13/2010	12/20/2010	05/23/2011	12/21/2010	12/20/2010	12/21/2010	12/21/2010	12/13/2010
SDG		DE036	DE037	DE037	DX029	DE159	DE050	DX029	DE050	DE050	DE036
Start Depth		0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Fluoride	mg/kg	1.4	1.7	0.9 J	2 J	2.9 J	1.6	2.4 J	1.3	1.3	1.1 U
Aluminum	mg/kg	10300	10300	7300	8990	10600	22100	14100	12600	9390	11700
Iron	mg/kg	17000	17800	13900	15700	14800	31800	18600	17600	15400	18700
Lead	mg/kg	20.2 J	25 J	15 J	12.7 J	21	18.6 J	49 J	12 J	10.3 J	10.8 J
Lithium	mg/kg	19.5	19.4	14.9	22.6 J	15.9	42.9	20.8 J	19.7	21.5	21.6
Magnesium	mg/kg	3910	4130	3090	3960	3220	7270	4530	4300	3420	4180
Manganese	mg/kg	234	254	247	218	232	389	306	267	230	252
Mercury	mg/kg	0.0049 J	0.0148 J	0.0998 U	0.121 U	0.0187 J	0.0109 J	0.021 J	0.0059 J	0.125 U	0.0039 J
Methyl Mercury	ug/kg	--	--	--	--	0.452	--	--	--	--	--
Molybdenum	mg/kg	0.584 J	0.707 J	0.691 J	0.357 J	1.59 J	0.783 J	0.676 J	0.56 J	0.364 J	0.471 J
Nickel	mg/kg	15.1 J	17.6	21.6	9.34 J	13.5 J	28 J	18.6 J	13.7 J	11.6 J	13 J
Potassium	mg/kg	2850	2790 J	1810 J	2630	2260 J	4840	3310	3270	3100	3390
Silver	mg/kg	0.0557 J	1.39 J	0.329 J	0.0249 J	0.315 J	0.161	0.127 J	0.0475 J	0.0238 J	0.0217 J
Sodium	mg/kg	54.3 J	78.8 J	64.8 J	56.6 J	161 J	93.5 J	121 J	61.9 J	59.6 J	62.3 J
Strontium	mg/kg	16.1	18.3	9.87	8.22 J	37.7	20.4	27 J	14.3	11.1	13.8
Thallium	mg/kg	0.302	0.298	0.435	0.252 J	0.265 J	0.585	0.321 J	0.267	0.268	0.31
Tin	mg/kg	10.7 U	11.2 U	10.2 U	12.6 U	16.6 U	12.6 U	13.7 U	11.4 U	13 U	10.7 U
Titanium	mg/kg	1200	1030	759	826	912	1440	1030	1030	821	1120
Antimony	mg/kg	0.22 R	0.192 J	0.286 J	0.247 UJ	0.437 J	0.203 J	0.266 UJ	0.0951 J	0.258 UJ	0.218 R
Arsenic	mg/kg	5.9 J	8.28 J	9.5 J	5.3 J	4.36 J	15.7 J	5.93 J	5.11 J	6.51 J	4.31 J
Beryllium	mg/kg	0.546 J	0.616	0.782	0.459	0.48 J	1.07	0.677	0.555	0.513	0.503 J
Barium	mg/kg	112 J	112 J	133 J	76.1 J	110 J	154	124 J	106	106	120 J
Boron	mg/kg	6.11	4.97 J	3.23 J	5.57 J	8.28 U	9.31	8.62	4.94 J	3.97 J	5.27 J
Cadmium	mg/kg	0.255 J	0.249 J	0.15 J	0.167 J	0.732 J	0.285 J	0.397 J	0.248 J	0.125 J	0.192 J
Chromium	mg/kg	25.1 J	25.4	36.8	13 J	15.4 J	41.7 J	23.8 J	24 J	18.3 J	20.5 J
Cobalt	mg/kg	7.18 J	6.3	7.49	4.99 J	3.92 J	13.1 J	7.03 J	6.49 J	6.8 J	6.78 J
Copper	mg/kg	12.7 J	13.1	15.8	6.53 J	13.1 J	22.4 J	12.8 J	9.33 J	7.54 J	9.21 J
Vanadium	mg/kg	44.2	42.8	58	27.7 J	34.3 J	79.5 J	46.2 J	44.4 J	37 J	41.7
Zinc	mg/kg	89.1	109 J	118 J	93.8 J	209 J	142	238 J	76.5	75.6	77.6
Zirconium	mg/kg	0.92 J	1.22 J	5.1 U	6.3 U	2.73 J	5.96 J	1.54 J	2.81 J	2.19 J	1.05 J
Calcium	mg/kg	3000	3360	1710	2330	11800 J	5580	4920	2530	2200	2320
Phosphorus	mg/kg	374	386 J	267 J	404	509 J	561	449	362	357	408
Selenium	mg/kg	0.151 J	0.168 J	0.209 J	0.143 J	0.22 J	0.49 J	0.266 J	0.161 J	0.136 J	0.129 J
Chromium VI	mg/kg	1.1 U	1.1 U	1.1 U	1.3 U	1.7 U	0.43 J	0.63 J	1.1 U	0.29 J	0.44 J
Perchlorate (314.0)	ug/kg	33.3 U	34.3 U	31.8 U	38.6 U	49.7 U	37.9 U	41.9 U	34.3 U	39.8 U	32.7 U
Perchlorate (6850)	ug/kg	--	5.7 U	--	--	--	--	--	--	--	--
Percent Moisture	%	10	12.6	5.8 U	22.2	39.6	20.9	28.4	12.6	24.6	8.3
Tetrabutyltin	ug/kg	--	--	--	--	3.2 U	--	--	--	--	--
Tributyltin	ug/kg	--	--	--	--	2.9 U	--	--	--	--	--

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

Appendix A2
Metals and Inorganics - Validated Data
Sediments

Sample Name		SED-031-SIV-SD-0.0-0.5	SED-032-SIV-SD-0.0-0.5	SED-033-SIV-SD-0.0-0.5	SED-034-SIV-SD-0.0-0.5	SED-035-SIV-SD-0.0-0.5	SED-036-SIV-SD-0.0-0.5	SED-037-SIV-SD-0.0-0.5	SED-038-SIV-SD-0.0-0.5	SED-039-SIV-SD-0.0-0.5	SED-040-SIV-SD-0.0-0.5
Sample Date		12/13/2010	12/13/2010	12/13/2010	12/20/2010	05/23/2011	12/21/2010	12/20/2010	12/21/2010	12/21/2010	12/13/2010
SDG		DE036	DE037	DE037	DX029	DE159	DE050	DX029	DE050	DE050	DE036
Start Depth		0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Dibutyltin	ug/kg	--	--	--	--	2.5 U	--	--	--	--	--
Monobutyltn	ug/kg	--	--	--	--	9.5 UJ	--	--	--	--	--
pH	pH unit	6.92	8.48	8	6.61	7.19	7.19	7.3	6.94	7.02	7.01

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

Appendix A3
PCBs and Dioxins - Validated Data
Sediments

Sample Name		SED-001-SIV-SD-0.0-0.5	SED-002-SIV-SD-0.0-0.5	SED-003-SIV-SD-0.0-0.5	SED-004-SIV-SD-0.0-0.5	SED-005-SIV-SD-0.0-0.5	SED-006-SIV-SD-0.0-0.5	SED-007-SIV-SD-0.0-0.6	SED-008-SIV-SD-0.0-0.5	SED-009-SIV-SD-0.0-0.5	SED-010-SIV-SD-0.0-0.5	SED-011-SIV-SD-0.0-0.5	SED-012-SIV-SD-0.0-0.5	SED-013-SIV-SD-0.0-0.5	SED-014-SIV-SD-0.0-0.5	SED-015-SIV-SD-0.0-0.5	SED-016-SIV-SD-0.0-0.5
Sample Date		12/17/2010	12/21/2010	12/20/2010	12/17/2010	12/20/2010	12/17/2010	12/20/2010	12/20/2010	01/13/2011	12/22/2010	12/16/2010	12/17/2010	12/16/2010	12/17/2010	12/21/2010	12/15/2010
SDG		DE045	DE050	DX029	DE045	DX029	DE045	DX029	DX029	DE060	DE051	DX026	DE045	DX026	DE045	DE050	DE040
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
2,3,7,8-TCDD	ng/kg	0.0787 J	1.2 U	0.108 J	1.24 U	1.24 UJ	0.0794 J	0.13 J	1.49 U	1.31 U	0.0453 J	0.12 J	1.06 U	0.0815 J	0.217 J	1.3 U	0.12 J
1,2,3,7,8,9-HxCDD	ng/kg	1.21 J	5.98 U	6.77 U	6.19 U	0.99 J	1.51 J	1.39 J	1.28 J	0.354 J	0.368 J	1.06 J	5.31 U	3 J	14.7	0.524 J	5.06 J
OCDD	ng/kg	236	13.8	223	240	62.3	259	337	180	54.6	58.4	314	153	869	49800 J	65.2	7800 J
1,2,3,4,6,7,8-HpCDD	ng/kg	27.7	2.08 J	22.1	21.9	8.71	29	46.2	18.9	7.27	7.16	32.2	15.8	93	4430 J	5.17 J	735
OCDF	ng/kg	4.93 J	12 U	8.23 J	52.6	3.16 J	9.52 J	9.62 J	7.73 J	2.84 J	2.13 J	10.8 J	5.17 J	28.3	2920	2.04 J	177
1,2,3,4,7,8-HxCDD	ng/kg	5.69 U	5.98 U	6.77 U	6.19 U	6.18 U	6.24 U	0.782 J	7.43 U	0.183 J	6.11 U	0.511 J	5.31 U	1.48 J	8.92	0.281 J	2.18 J
1,2,3,7,8-PeCDD	ng/kg	5.69 U	5.98 U	6.77 U	6.19 U	6.18 U	6.24 U	0.58 J	7.43 U	0.245 J	0.22 J	0.432 J	5.31 U	0.847 J	2.8 J	0.419 J	0.82 J
2,3,7,8-TCDF	ng/kg	1.76	0.112 J	0.719 J	1.24 U	4.44	1.1 J	0.307 J	1.1 J	0.338 J	1.22 U	1.1 U	1.06 U	0.355 J	0.384 J	0.349 J	0.0902 J
1,2,3,4,7,8,9-HpCDF	ng/kg	5.69 U	5.98 U	6.77 U	6.19 U	6.18 U	6.24 U	1 J	7.43 U	6.54 U	6.11 U	0.462 J	5.31 U	1.11 J	85.3	0.314 J	11.7
2,3,4,7,8-PeCDF	ng/kg	1.66 J	5.98 U	6.77 U	6.19 U	6.18 U	1.28 J	2.16 J	1.17 J	0.956 J	0.397 J	0.515 J	5.31 U	0.68 J	5.88 U	0.787 J	5.58 U
1,2,3,7,8-PeCDF	ng/kg	11.7	5.98 U	1.98 J	6.19 U	2.12 J	1.38 J	0.751 J	3.1 J	0.618 J	6.11 U	0.307 J	5.31 U	0.551 J	5.88 U	0.452 J	0.363 J
1,2,3,6,7,8-HxCDF	ng/kg	5.69 U	5.98 U	6.77 U	6.19 U	6.18 U	6.24 U	1.8 J	7.43 U	0.282 J	6.11 U	5.51 U	5.31 U	0.743 J	12.4	0.373 J	2.82 J
1,2,3,6,7,8-HxCDD	ng/kg	1.56 J	0.149 J	1.06 J	0.85 J	0.918 J	1.69 J	2.45 J	1.37 J	0.49 J	0.467 J	1.4 J	5.31 U	3.74 J	83.8	0.511 J	20.7
2,3,4,6,7,8-HxCDF	ng/kg	5.69 U	5.98 U	6.77 U	6.19 U	6.18 U	6.24 U	1.9 J	7.43 U	6.54 U	6.11 U	5.51 U	5.31 U	0.972 J	12.9	0.51 J	4.66 J
1,2,3,4,6,7,8-HpCDF	ng/kg	5.69 U	0.578 J	6.77 U	17.4	6.18 U	6.24 U	8.14	7.43 U	1.52 J	1.09 J	5.49 J	5.31 U	14.3	455	1.12 J	75.4
1,2,3,4,7,8-HxCDF	ng/kg	1.12 J	5.98 U	6.77 U	6.19 U	6.18 U	6.24 U	3.3 J	7.43 U	0.531 J	0.287 J	5.51 U	5.31 U	0.855 J	18.1	0.334 J	2.42 J
1,2,3,7,8,9-HxCDF	ng/kg	5.69 U	5.98 U	6.77 U	6.19 U	6.18 U	6.24 U	0.69 J	7.43 U	6.54 U	6.11 U	5.51 U	5.31 U	5.75 U	2.86 J	0.331 J	0.495 J
Aroclor 1260	ug/kg	18 J	0.65 J	45	2.1	4.2 J	4.9	27	25 U	3.3 J	1.2 J	1.1 J	1.8 U	3.3	1.9 J	0.71 J	4
Aroclor 1254	ug/kg	43 J	2 U	63	3.2	12 J	4.8	3.1 J	300	3.7 J	2 J	2.2	1.8 U	5.9	4.4	2.4 J	1.9 U
Aroclor 1268	ug/kg	3.9 U	2 U	12 U	2.1 U	4.2 U	2.1 U	4.1 U	25 U	2.2 U	2.1 U	1.9 U	1.8 U	2 U	2 U	2.2 U	1.9 U
Aroclor 1221	ug/kg	3.9 U	2 U	12 U	2.1 U	4.2 U	2.1 U	4.1 U	25 U	2.2 U	2.1 U	1.9 U	1.8 U	2 U	2 U	2.2 U	1.9 U
Aroclor 5460	ug/kg	8.2 J	1.3 J	22 UJ	4.1 UJ	8 J	7.6 J	9.6 J	49 UJ	3 J	4 U	2.6 J	3.5 UJ	4.7 J	4.8 J	1.6 J	4.6
Aroclor 1232	ug/kg	3.9 U	2 U	12 U	2.1 U	4.2 U	2.1 U	4.1 U	25 U	2.2 U	2.1 U	1.9 U	1.8 U	2 U	2 U	2.2 U	1.9 U
Aroclor 5442	ug/kg	7.5 UJ	3.9 UJ	22 UJ	4.1 UJ	8.2 UJ	4.1 UJ	8 UJ	49 UJ	4.3 UJ	4 U	3.6 UJ	3.5 UJ	3.8 UJ	3.9 UJ	4.3 UJ	3.7 U
Aroclor 1248	ug/kg	3.9 U	2 U	12 U	2.1 U	4.2 U	2.1 U	4.1 U	25 U	2.2 U	2.1 U	1.9 U	1.8 U	2 U	2 U	2.2 U	1.9 U
Aroclor 1016	ug/kg	3.9 U	2 U	12 U	2.1 U	4.2 U	2.1 U	4.1 U	25 U	2.2 U	2.1 U	1.9 U	1.8 U	2 U	2 U	2.2 U	1.9 U
Aroclor 1262	ug/kg	3.9 U	2 U	12 U	2.1 U	4.2 U	2.1 U	4.1 U	25 U	2.2 U	2.1 U	1.9 U	1.8 U	2 U	2 U	2.2 U	1.9 U
Aroclor 1242	ug/kg	3.9 U	2 U	12 U	2.1 U	4.2 U	2.1 U	4.1 U	25 U	2.2 U	2.1 U	1.9 U	1.8 U	2 U	2 U	2.2 U	1.9 U
Aroclor 5432	ug/kg	7.5 UJ	3.9 UJ	22 UJ	4.1 UJ	8.2 UJ	4.1 UJ	8 UJ	49 UJ	4.3 UJ	4 U	3.6 UJ	3.5 UJ	3.8 UJ	3.9 UJ	4.3 UJ	3.7 U

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

Appendix A3
PCBs and Dioxins - Validated Data
Sediments

Sample Name		SED-017-SIV-SD-0.0-0.5	SED-018-SIV-SD-0.0-0.5	SED-019-SIV-SD-0.0-0.5	SED-020-SIV-SD-0.0-0.5	SED-021-SIV-SD-0.0-0.5	SED-022-SIV-SD-0.0-0.5	SED-023-SIV-SD-0.0-0.5	SED-024-SIV-SD-0.0-0.5	SED-025-SIV-SD-0.0-0.5	SED-026-SIV-SD-0.0-0.5	SED-027-SIV-SD-0.0-0.5	SED-028-SIV-SD-0.0-0.5	SED-029-SIV-SD-0.0-0.5	SED-030-SIV-SD-0.0-0.5	SED-031-SIV-SD-0.0-0.5	SED-032-SIV-SD-0.0-0.5
Sample Date		12/16/2010	12/15/2010	12/16/2010	12/16/2010	12/15/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	01/13/2011	12/13/2010	12/13/2010	12/13/2010	12/13/2010
SDG		DX026	DE040	DX026	DX026	DE040	DE039	DE039	DE039	DE038	DE039	DE039	DE060	DE036	DE036	DE036	DE037
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
2,3,7,8-TCDD	ng/kg	0.19 J	0.0408 J	2.18	0.284 J	0.0453 J	0.184 J	1.12 U	1.15 U	1.12 U	1.16 U	1.16 U	1.42 U	0.187 J	1.19 U	0.0302 J	0.228
1,2,3,7,8,9-HxCDD	ng/kg	5.15 J	0.458 J	26.7	5.57	0.745 J	1.93 J	0.391 J	0.43 J	5.58 U	1.6 J	0.471 J	0.156 J	4.22 J	0.836 J	1.18 J	3.68
OCDD	ng/kg	3550	191	24600 J	2980	565	1310	29.8	32	31.4	1490	148	31.3	1970	381	1310	982
1,2,3,4,6,7,8-HpCDD	ng/kg	419	16.4	1720	293	54.5	136	5.1 J	5 J	4.55 J	76.7	11.3	2.91 J	182	40.6	103	86.8
OCDF	ng/kg	82.4	8.78 J	703	87.8	21	80.4	11.2 U	2.24 J	11.2 U	50.3	8.78 J	1.72 J	106	21.5	99.4	43.1 U
1,2,3,4,7,8-HxCDD	ng/kg	4.07 J	0.202 J	16	2.51 J	0.391 J	0.986 J	5.61 U	5.73 U	5.58 U	0.684 J	5.79 U	0.123 J	2.99 J	0.368 J	0.578 J	5.72 U
1,2,3,7,8-PeCDD	ng/kg	0.963 J	0.19 J	4.86 J	1.07 J	0.17 J	0.532 J	5.61 U	5.73 U	5.58 U	0.376 J	5.79 U	7.08 U	1.15 J	5.97 U	0.385 J	1.4 J
2,3,7,8-TCDF	ng/kg	0.501 J	0.128 J	9.59	0.492 J	1.05 U	0.473 J	0.366 J	0.324 J	1.12 U	0.426 J	0.384 J	0.0948 J	1.03 J	1.19 U	0.331 J	0.556 J
1,2,3,4,7,8,9-HpCDF	ng/kg	3.16 J	5.55 U	21.9	4.32 J	0.816 J	2.68 J	5.61 U	5.73 U	5.58 U	0.727 J	5.79 U	7.08 U	1.99 J	5.97 U	1.07 J	1.13 J
2,3,4,7,8-PeCDF	ng/kg	1.11 J	0.461 J	9.6	0.802 J	5.27 U	0.792 J	0.57 J	0.583 J	5.58 U	0.871 J	0.736 J	0.266 J	4.53 J	0.844 J	0.812 J	5.72 U
1,2,3,7,8-PeCDF	ng/kg	0.661 J	0.26 J	18.1	0.971 J	0.192 J	0.657 J	0.307 J	0.275 J	5.58 U	1.91 J	0.588 J	0.206 J	10.6	1.71 J	1.21 J	5.72 U
1,2,3,6,7,8-HxCDF	ng/kg	1.35 J	0.196 J	11.4	1.4 J	0.343 J	1.06 J	5.61 U	5.73 U	5.58 U	0.673 J	0.387 J	7.08 U	2.44 J	0.326 J	0.541 J	5.72 U
1,2,3,6,7,8-HxCDD	ng/kg	15.1	0.619 J	62.8	10.9	2.24 J	5.6	0.421 J	0.441 J	5.58 U	4.59 J	0.721 J	0.226 J	6.88	1.12 J	3.05 J	4.48 J
2,3,4,6,7,8-HxCDF	ng/kg	2.2 J	5.55 U	13.7	2.26 J	0.513 J	1.35 J	5.61 U	5.73 U	5.58 U	0.683 J	5.79 U	7.08 U	3.27 J	0.674 J	0.768 J	1.46
1,2,3,4,6,7,8-HpCDF	ng/kg	38.5	2.93 J	239	36.6	9.15	29.1	0.994 J	1.22 J	5.58 U	13.4	3.24 J	7.08 U	29.4	7.35	22.8	14.6 J
1,2,3,4,7,8-HxCDF	ng/kg	1.31 J	5.55 U	11.8	1.31 J	5.27 U	0.858 J	5.61 U	5.73 U	5.58 U	0.673 J	0.418 J	7.08 U	2 J	0.523 J	0.593 J	5.72 U
1,2,3,7,8,9-HxCDF	ng/kg	0.332 J	5.55 U	2.48 J	0.322 J	5.27 U	5.41 U	5.61 U	5.73 U	5.58 U	5.8 U	5.79 U	7.08 U	0.718 J	5.97 U	5.56 U	0.369
Aroclor 1260	ug/kg	6.9	1.1 J	180	10	36 U	37 U	0.7 J	1.5 J	1.9 U	12 J	3.1 U	2.4 U	19 U	5.6	5.3 J	9.5
Aroclor 1254	ug/kg	4.1	1.1 J	99	2.5 J	36 U	37 U	1.4 J	2.4 J	1.2 J	18 J	11 J	1.5 J	180	6.3	8.4 J	18
Aroclor 1268	ug/kg	3.8 U	1.9 U	23 U	3.7 U	36 U	37 U	1.9 U	1.9 U	1.9 U	3.9 U	3.9 U	2.4 U	19 U	4.1 U	9.4 U	3.9 U
Aroclor 1221	ug/kg	3.8 U	1.9 U	23 U	3.7 U	36 U	37 U	1.9 U	1.9 U	1.9 U	3.9 U	3.9 U	2.4 U	19 U	4.1 U	9.4 U	3.9 U
Aroclor 5460	ug/kg	13 J	3.7	130 J	6.6 J	70 U	71 UJ	3.7 UJ	3.1 J	3.7 UJ	22 J	3.6 J	4.7 UJ	170 J	6.7 J	9.3 J	8.5
Aroclor 1232	ug/kg	3.8 U	1.9 U	23 U	3.7 U	36 U	37 U	1.9 U	1.9 U	1.9 U	3.9 U	3.9 U	2.4 U	19 U	4.1 U	9.4 U	3.9 U
Aroclor 5442	ug/kg	7.5 UJ	3.7 U	44 UJ	7.2 UJ	70 U	71 UJ	3.7 UJ	3.8 UJ	3.7 UJ	7.7 UJ	7.6 UJ	4.7 UJ	37 UJ	7.9 UJ	18 UJ	7.6 U
Aroclor 1248	ug/kg	3.8 U	1.9 U	23 U	3.7 U	36 U	37 U	1.9 U	1.9 U	1.9 U	17 J	6 U	2.4 U	19 U	4.1 U	9.4 U	3.9 U
Aroclor 1016	ug/kg	3.8 U	1.9 U	23 U	3.7 U	36 U	37 U	1.9 U	1.9 U	1.9 U	3.9 U	3.9 U	2.4 U	19 U	4.1 U	9.4 U	3.9 U
Aroclor 1262	ug/kg	3.8 U	1.9 U	23 U	3.7 U	36 U	37 U	1.9 U	1.9 U	1.9 U	3.9 U	3.9 U	2.4 U	19 U	4.1 U	9.4 U	3.9 U
Aroclor 1242	ug/kg	3.8 U	1.9 U	23 U	3.7 U	36 U	37 U	1.9 U	1.9 U	1.9 U	3.9 U	3.9 U	2.4 U	19 U	4.1 U	9.4 U	3.9 U
Aroclor 5432	ug/kg	7.5 UJ	3.7 U	44 UJ	7.2 UJ	70 U	71 UJ	3.7 UJ	3.8 UJ	3.7 UJ	7.7 UJ	7.6 UJ	4.7 UJ	37 UJ	7.9 UJ	18 UJ	7.6 U

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

Appendix A3
PCBs and Dioxins - Validated Data
Sediments

Sample Name		SED-033-SIV-SD-0.0-0.5	SED-034-SIV-SD-0.0-0.5	SED-035-SIV-SD-0.0-0.5	SED-036-SIV-SD-0.0-0.5	SED-037-SIV-SD-0.0-0.5	SED-038-SIV-SD-0.0-0.5	SED-039-SIV-SD-0.0-0.5	SED-040-SIV-SD-0.0-0.5
Sample Date		12/13/2010	12/20/2010	05/23/2011	12/21/2010	12/20/2010	12/21/2010	12/21/2010	12/13/2010
SDG		DE037	DX029	DE159	DE050	DX029	DE050	DE050	DE036
Start Depth		0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result
2,3,7,8-TCDD	ng/kg	0.103	1.29 U	0.209 J	1.26 U	0.139 J	0.145 J	1.33 U	1.09 U
1,2,3,7,8,9-HxCDD	ng/kg	2.01	6.43 U	2.69 J	6.32 U	2.4 J	6.93	6.63 U	0.493 J
OCDD	ng/kg	407	21.4	924	6.76 J	692	1750	18.1	312
1,2,3,4,6,7,8-HpCDD	ng/kg	45.6	3.56 J	91.1	1.22 J	95.9	262	2.51 J	25.3
OCDF	ng/kg	20.7 U	12.9 U	30.1	12.6 U	8.47 J	43.7	13.3 U	15.5
1,2,3,4,7,8-HxCDD	ng/kg	5.31 U	6.43 U	1.31 J	6.32 U	0.876 J	2.89 J	0.114 J	0.283 J
1,2,3,7,8-PeCDD	ng/kg	0.874 J	6.43 U	0.874 J	6.32 U	6.98 U	1.51 J	0.223 J	0.316 J
2,3,7,8-TCDF	ng/kg	0.227 J	1.29 U	2.92	0.175 J	1.19 J	0.217 J	0.172 J	1.09 U
1,2,3,4,7,8,9-HpCDF	ng/kg	0.643 J	6.43 U	1.18 J	6.32 U	6.98 U	2.1 J	6.63 U	5.45 U
2,3,4,7,8-PeCDF	ng/kg	5.31 U	6.43 U	0.96 J	6.32 U	1.16 J	0.598 J	6.63 U	0.336 J
1,2,3,7,8-PeCDF	ng/kg	5.31 U	6.43 U	0.734 J	6.32 U	1.57 J	0.274 J	6.63 U	0.323 J
1,2,3,6,7,8-HxCDF	ng/kg	5.31 U	6.43 U	0.736 J	6.32 U	6.98 U	0.665 J	6.63 U	5.45 U
1,2,3,6,7,8-HxCDD	ng/kg	5.31 U	6.43 U	3.48 J	6.32 U	3.8 J	12.1	0.257 J	1.09 J
2,3,4,6,7,8-HxCDF	ng/kg	1.07	6.43 U	0.983 J	6.32 U	6.98 U	1.07 J	6.63 U	5.45 U
1,2,3,4,6,7,8-HpCDF	ng/kg	9.94 J	6.43 U	12	6.32 U	6.98 U	17.5	0.459 J	4.46 J
1,2,3,4,7,8-HxCDF	ng/kg	5.31 U	6.43 U	0.975 J	6.32 U	6.98 U	0.67 J	6.63 U	5.45 U
1,2,3,7,8,9-HxCDF	ng/kg	0.217	6.43 U	8.12 U	6.32 U	6.98 U	0.358 J	6.63 U	5.45 U
Aroclor 1260	ug/kg	2.1 J	1.3 J	3.2	0.77 J	4.7 U	1 J	1.3 J	4.3
Aroclor 1254	ug/kg	1.7 J	1.7 J	2.8 U	2.1 U	88	1.9 U	4.2 J	2.4
Aroclor 1268	ug/kg	3.6 U	2.2 U	2.8 U	2.1 U	4.7 U	1.9 U	2.3 U	1.9 U
Aroclor 1221	ug/kg	3.6 U	2.2 U	2.8 U	2.1 U	4.7 U	1.9 U	2.3 U	1.9 U
Aroclor 5460	ug/kg	7 U	1.5 J	3.9 J	4.2 UJ	140 J	2.8 J	2.1 J	4.2 J
Aroclor 1232	ug/kg	3.6 U	2.2 U	2.8 U	2.1 U	4.7 U	1.9 U	2.3 U	1.9 U
Aroclor 5442	ug/kg	7 U	4.2 UJ	5.5 U	4.2 UJ	9.2 UJ	3.8 UJ	4.4 UJ	3.6 UJ
Aroclor 1248	ug/kg	3.6 U	2.2 U	6.8	2.1 U	4.7 U	1.9 U	2.3 U	1.9 U
Aroclor 1016	ug/kg	3.6 U	2.2 U	2.8 U	2.1 U	4.7 U	1.9 U	2.3 U	1.9 U
Aroclor 1262	ug/kg	3.6 U	2.2 U	2.8 U	2.1 U	4.7 U	1.9 U	2.3 U	1.9 U
Aroclor 1242	ug/kg	3.6 U	2.2 U	2.8 U	2.1 U	4.7 U	1.9 U	2.3 U	1.9 U
Aroclor 5432	ug/kg	7 U	4.2 UJ	5.5 U	4.2 UJ	9.2 UJ	3.8 UJ	4.4 UJ	3.6 UJ

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

Appendix A4
Herbicides and Pesticides - Validated Data
Sediments

Sample Name		SED-001-SIV-SD-0.0-0.5	SED-002-SIV-SD-0.0-0.5	SED-003-SIV-SD-0.0-0.5	SED-004-SIV-SD-0.0-0.5	SED-005-SIV-SD-0.0-0.5	SED-006-SIV-SD-0.0-0.5	SED-007-SIV-SD-0.0-0.6	SED-008-SIV-SD-0.0-0.5	SED-009-SIV-SD-0.0-0.5	SED-010-SIV-SD-0.0-0.5	SED-011-SIV-SD-0.0-0.5	SED-012-SIV-SD-0.0-0.5	SED-013-SIV-SD-0.0-0.5	SED-014-SIV-SD-0.0-0.5	SED-015-SIV-SD-0.0-0.5	SED-016-SIV-SD-0.0-0.5
Sample Date		12/17/2010	12/21/2010	12/20/2010	12/17/2010	12/20/2010	12/17/2010	12/20/2010	12/20/2010	01/13/2011	12/22/2010	12/16/2010	12/17/2010	12/16/2010	12/17/2010	12/21/2010	12/15/2010
SDG		DE045	DE050	DX029	DE045	DX029	DE045	DX029	DX029	DE060	DE051	DX026	DE045	DX026	DE045	DE050	DE040
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Dichlorprop	ug/kg	1.9 U	2 UJ	2.3 U	2.1 U	2.1 U	2 J	2.1 U	2.5 U	2.2 U	2.1 U	1.9 U	1.8 U	2 U	2 U	2.2 U	1.9 U
Dicamba	ug/kg	1.9	1.4 UJ	1.6 U	1.5 U	1.5 U	0.78 J	1.5 U	1.8 U	1.6 U	0.74 U	0.59 J	0.77 J	0.78 J	1.4 U	1.6 U	1.3 U
2,2-Dichlor-Propionic Ac	ug/kg	10 U	11 U	12 UJ	11 U	11 UJ	11 U	11 U	13 U	12 U	11 U	9.9 U	9.6 U	10 U	11 U	12 U	10 U
Dinitrobutyl Phenol	ug/kg	2.7 R	2.9 R	3.2 UJ	3 R	3 UJ	3 R	2.9 U	3.6 U	3.1 R	2.9 R	2.6 R	2.5 R	2.8 R	2.8 R	3.1 R	2.7 R
MCPP	ug/kg	280 U	300 U	220 J	310 U	310 U	360	300 U	370 U	340 R	310 U	280 U	240 J	290 U	290 U	330 U	430
2,4,5-TP	ug/kg	0.19 U	0.2 UJ	0.23 U	0.21 U	0.21 UJ	0.21 U	0.21 U	0.25 U	0.22 U	0.21 U	0.19 U	0.18 U	0.2 U	0.2 U	0.22 U	0.2
2,4,5-T	ug/kg	0.19 U	0.2 U	0.23 U	0.21 U	0.21 U	0.21 U	0.21 U	0.25 U	0.22 U	0.21 U	0.19 U	0.18 U	0.2 U	0.2 U	0.22 U	0.19 U
MCPA	ug/kg	490 U	300 U	340 J	310 U	310 U	390	300 U	370 U	1700 U	310 U	280 U	270 U	870	580 U	330 U	430
2,4-D	ug/kg	4.1 U	4.3 U	4.9 UJ	4.5 U	4.4 UJ	4.5 U	4.4 U	5.3 U	4.7 U	4.4 U	1.9 J	3.8 U	4.1 U	4.2 U	4.7 U	4 U
2,4 DB	ug/kg	1.9 U	3.7 U	2.3 U	2.1 U	4.6 U	2.1 U	2.3 J	3.4 U	3.5 R	2.1 U	8.9 U	6.9 U	2 U	7.5 U	2.2 U	3.2 U
Toxaphene	ug/kg	7.5 U	7.9 U	8.9 U	8.2 R	8.2 UJ	8.2 UJ	8 UJ	9.8 R	8.6 UJ	8.1 U	7.3 U	7 U	7.6 U	7.8 U	8.6 U	7.4 U
Heptachlor Epoxide	ug/kg	0.45 U	0.2 U	0.74 U	0.21 R	0.21 UJ	0.21 UJ	0.24 U	0.64 R	0.22 UJ	0.2 U	0.45 U	0.18 U	0.19 U	0.2 U	0.22 U	0.19 U
Endosulfan Sulfate	ug/kg	0.39 U	0.41 U	0.46 U	0.42 R	0.42 UJ	0.42 UJ	0.41 U	0.51 R	0.44 UJ	0.61 U	0.37 U	0.36 U	0.39 U	0.4 U	0.44 U	0.38 U
Mirex	ug/kg	0.39 U	0.41 U	0.46 U	0.42 R	0.42 UJ	0.42 UJ	0.41 U	0.51 R	0.44 UJ	0.5 U	0.6 U	0.36 U	0.55 U	0.4 U	0.44 U	1 U
Aldrin	ug/kg	0.19 U	0.2 U	0.22 U	0.21 R	0.21 UJ	0.21 UJ	0.2 U	0.25 R	0.22 UJ	0.2 U	0.18 U	0.18 U	0.19 U	0.2 U	0.22 U	0.19 U
Alpha-BHC	ug/kg	0.19 U	0.2 UJ	0.22 U	0.21 R	0.21 UJ	0.21 UJ	0.2 U	0.25 R	0.22 UJ	0.2 U	1.2 J	0.18 U	0.19 U	0.2 U	0.22 UJ	0.19 U
Beta-BHC	ug/kg	0.19 U	0.2 U	0.22 U	0.21 R	0.21 UJ	0.21 UJ	0.2 U	0.25 R	0.22 UJ	0.2 U	0.18 U	0.18 U	0.19 U	0.2 U	0.22 U	0.19 U
Delta-BHC	ug/kg	0.074 J	0.2 U	0.22 U	0.21 R	0.21 UJ	0.14 J	0.2 U	0.25 R	0.22 UJ	0.2 U	0.27 J	0.18 U	0.071 J	0.11 J	0.11 J	0.19 U
Endosulfan II	ug/kg	2.1 U	0.41 U	1.7 U	0.42 R	0.42 UJ	0.42 UJ	0.41 U	0.79 R	0.44 UJ	0.44 U	0.37 U	0.36 U	0.39 U	0.4 U	0.44 U	0.38 UJ
4,4'-DDT	ug/kg	7.8	0.55 U	11	0.42 R	0.83 UJ	1.2 UJ	3.8 J	10 J	1.9 UJ	0.9 U	1.2 U	1.4	1.1 U	0.92 U	0.89 U	0.99 U
Endrin Ketone	ug/kg	0.39 U	0.41 U	0.46 U	0.42 R	0.42 UJ	0.42 UJ	0.41 U	0.51 R	0.44 UJ	0.42 U	0.37 U	0.36 U	0.39 U	0.4 U	0.44 U	0.38 U
Chlordane	ug/kg	3.9 U	4.1 U	4.6 U	4.2 R	4.2 UJ	4.2 UJ	5.7 U	5.1 R	4.4 UJ	4.2 U	5 U	3.6 U	7 U	4 U	4.4 U	3.8 U
Gamma-BHC (Lindane)	ug/kg	0.19 U	0.2 UJ	0.058 J	0.21 R	0.21 UJ	0.21 UJ	0.06 J	0.25 R	0.22 UJ	0.2 U	0.18 U	0.18 U	0.19 U	0.2 U	0.22 UJ	0.19 U
Dieldrin	ug/kg	0.47 U	0.41 U	0.93 U	0.42 R	0.42 UJ	0.5 UJ	0.41 U	0.64 R	0.44 UJ	0.42 U	0.37 U	0.12 J	0.39 U	0.4 U	0.44 U	0.38 U
Endrin	ug/kg	0.39 U	0.41 U	1.2 J	0.42 R	0.42 UJ	0.42 UJ	0.41 U	0.98 R	0.44 UJ	0.42 U	0.37 U	0.36 U	0.39 U	0.4 U	0.44 U	0.38 U
Methoxychlor	ug/kg	1.9 U	2 U	2.2 U	2.1 R	2.1 UJ	2.1 UJ	2 U	2.5 R	2.2 UJ	2 U	1.8 U	1.8 U	1.9 U	2 U	2.2 U	1.9 U
4,4'-DDD	ug/kg	1.9 U	0.41 U	0.46 U	0.42 R	0.42 UJ	1.3 UJ	0.41 U	0.51 R	0.44 UJ	0.42 U	0.37 U	0.35 J	0.39 U	0.48 U	0.44 U	0.38 U
4,4'-DDE	ug/kg	2.6 U	0.41 U	2.7 U	0.42 R	0.53 UJ	1 UJ	1.6	2.8 R	1.5 UJ	1.1	1.4 U	1	1.7 U	0.73 U	0.76 U	0.38 U
Endrin Aldehyde	ug/kg	0.89 U	0.41 U	0.8 U	0.42 R	0.42 UJ	0.42 UJ	0.79 U	0.51 R	0.54 UJ	0.42 U	0.64 U	0.4	0.85 U	0.4 U	0.53 U	0.38 U
Heptachlor	ug/kg	0.19 U	0.2 U	0.22 U	0.21 R	0.21 UJ	0.21 UJ	0.2 U	0.25 R	0.26 UJ	0.2 U	0.18 U	0.18 U	0.19 U	0.2 U	0.11 J	0.19 U
Endosulfan I	ug/kg	0.19 U	0.2 U	0.22 U	0.21 R	0.21 UJ	0.43 UJ	0.2 U	0.25 R	0.22 UJ	0.21 U	0.13 J	0.18 U	0.19 U	0.2 U	0.22 U	0.19 U

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

Appendix A4
Herbicides and Pesticides - Validated Data
Sediments

Sample Name		SED-017-SIV-SD-0.0-0.5	SED-018-SIV-SD-0.0-0.5	SED-019-SIV-SD-0.0-0.5	SED-020-SIV-SD-0.0-0.5	SED-021-SIV-SD-0.0-0.5	SED-022-SIV-SD-0.0-0.5	SED-023-SIV-SD-0.0-0.5	SED-024-SIV-SD-0.0-0.5	SED-025-SIV-SD-0.0-0.5	SED-026-SIV-SD-0.0-0.5	SED-027-SIV-SD-0.0-0.5	SED-028-SIV-SD-0.0-0.5	SED-029-SIV-SD-0.0-0.5	SED-030-SIV-SD-0.0-0.5	SED-031-SIV-SD-0.0-0.5	SED-032-SIV-SD-0.0-0.5
Sample Date		12/16/2010	12/15/2010	12/16/2010	12/16/2010	12/15/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	01/13/2011	12/13/2010	12/13/2010	12/13/2010	12/13/2010
SDG		DX026	DE040	DX026	DX026	DE040	DE039	DE039	DE039	DE038	DE039	DE039	DE060	DE036	DE036	DE036	DE037
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Dichlorprop	ug/kg	1.9 U	1.9 U	2.3 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U	2 U	2 U	2.4 U	1.9 U	2 U	1.9 U	1.9 U
Dicamba	ug/kg	0.49 J	1.3 U	0.73 J	0.57 J	1.3 U	1.3 U	0.69 J	1 J	1.3 U	0.57 J	1.3 J	1.7 U	1.3 U	0.78 J	0.69 J	1.4 U
2,2-Dichlor-Propionic Ac	ug/kg	10 U	10 U	12 U	9.8 U	9.5 U	9.7 UJ	10 UJ	10 UJ	10 U	10 UJ	10 UJ	13 U	10 U	11 U	10 U	10 U
Dinitrobutyl Phenol	ug/kg	2.7 R	2.7 R	3.2 R	2.6 R	2.5 R	2.6 R	2.7 R	2.8 R	2.7 R	2.8 R	2.8 R	3.4 R	2.7 R	2.9 R	2.7 R	2.7 R
MCPP	ug/kg	220 J	200 J	670 U	540 U	370	270 U	280 U	290 U	280 U	290 U	290 U	570 U	280 U	300 U	280 U	290 U
2,4,5-TP	ug/kg	0.19 U	0.23	0.53	0.18 U	0.18 U	0.84 U	0.19 U	0.19 U	0.19 U	0.2 U	0.23	0.24 U	0.19 U	0.2 U	0.19 U	0.19 U
2,4,5-T	ug/kg	0.19 U	0.19 U	0.62 U	0.18 U	0.18 U	0.38 J	0.19 U	0.19 U	0.19 U	0.2 U	0.2 U	0.24 U	0.33 J	0.2 U	0.19 U	0.19 U
MCPA	ug/kg	360 U	760	700	310	280 U	1800 J	280 UJ	290 UJ	700	1200 J	290 UJ	450 U	340 U	500 U	280 U	1100 U
2,4-D	ug/kg	1.9 J	4 U	4.9 U	3.9 U	3.8 U	3.9 U	4 U	4.1 U	1.4 J	4.2 U	4.2 U	5.1 U	4 U	3 J	4 U	4.1 U
2,4 DB	ug/kg	1.9 U	12 U	2.3 U	10 U	4.7 U	14 U	14	11 U	9.2 U	2 U	8.9 U	3.8	1.9 U	12 U	16 U	30 U
Toxaphene	ug/kg	7.5 UJ	7.3 U	44 U	7.2 U	7 R	71 U	37 U	38 U	7.4 U	7.7 U	7.6 U	9.3 U	37 U	7.9 U	7.3 U	7.6 U
Heptachlor Epoxide	ug/kg	0.19 UJ	0.18 U	1.1 U	0.18 U	0.17 R	1.8 U	0.93 U	0.95 U	0.19 U	0.19 UJ	0.39 UJ	0.24 U	1.2 U	0.28 U	0.18 U	0.33 U
Endosulfan Sulfate	ug/kg	0.38 UJ	0.38 U	2.3 U	0.37 U	0.36 R	3.7 U	1.9 U	1.9 U	0.38 U	0.44 UJ	0.49 J	0.48 U	1.9 U	0.41 U	0.38 U	0.76 U
Mirex	ug/kg	0.55 UJ	0.38 U	2.3 U	0.37 U	0.36 R	3.7 U	1.9 U	2.5 U	0.6 U	0.42 UJ	0.61 UJ	0.48 U	1.9 U	0.41 U	0.38 U	0.39 U
Aldrin	ug/kg	0.19 UJ	0.18 U	1.1 U	0.18 U	0.17 R	1.8 U	0.93 U	0.95 U	0.19 U	0.19 U	0.19 U	0.24 U	0.92 U	0.2 U	0.18 U	0.19 U
Alpha-BHC	ug/kg	0.19 UJ	0.18 U	1.1 U	0.18 U	0.17 R	1.8 U	0.93 U	0.95 U	0.19 U	0.066 J	0.19 U	0.24 U	0.29 J	0.2 U	0.18 U	0.19 U
Beta-BHC	ug/kg	0.19 UJ	0.18 U	1.1 U	0.18 U	0.17 R	1.8 U	0.93 U	0.95 U	0.19 U	0.19 U	0.19 U	0.24 U	0.92 U	0.54	0.18 U	0.35 J
Delta-BHC	ug/kg	0.19 UJ	0.078 J	0.29 J	0.075 J	0.81 J	2.6 J	0.26 J	0.93 J	0.22	0.19 U	0.24	0.24 U	0.92 U	0.2 U	0.18 U	0.19 J
Endosulfan II	ug/kg	0.38 UJ	0.38 UJ	2.3 U	0.37 U	0.36 R	3.7 U	1.9 U	1.9 U	0.66 U	0.39 UJ	0.39 UJ	0.48 U	1.9 U	0.41 U	0.38 U	0.39 U
4,4'-DDT	ug/kg	2.1 UJ	0.38 U	32 U	1 U	0.62 J	1.6 J	1.9 U	1.9 U	2.1 U	4.4 J	2.2 UJ	0.48 U	8.5 U	2.6 U	2.3 U	2.4 U
Endrin Ketone	ug/kg	0.38 UJ	0.38 U	2.3 U	0.37 U	0.36 R	3.7 U	1.9 U	1.9 U	0.38 U	0.39 UJ	0.39 UJ	0.48 U	1.9 U	0.41 U	0.38 U	0.39 U
Chlordane	ug/kg	3.8 UJ	3.8 U	23 U	3.7 U	3.6 R	37 U	19 U	19 U	3.8 U	3.9 U	4.2 U	4.8 U	19 U	4.7 U	3.8 U	5 U
Gamma-BHC (Lindane)	ug/kg	0.19 UJ	0.18 U	1.1 U	0.18 U	1.3 J	2.7 J	0.93 U	0.95 U	0.19 U	0.19 U	0.19 U	0.24 U	0.92 U	0.2 U	0.18 U	0.19 U
Dieldrin	ug/kg	0.38 UJ	0.38 U	2.3 U	0.37 U	0.36 R	3.7 U	1.9 U	1.9 U	0.33 U	0.87 UJ	0.39 UJ	0.48 U	1.9 U	0.44 U	0.38 U	0.47 U
Endrin	ug/kg	0.38 UJ	0.38 U	2.3 U	0.37 U	0.36 R	3.7 U	1.9 U	1.9 U	0.38 U	0.39 UJ	0.39 UJ	0.48 U	1.9 U	0.41 U	0.38 U	0.39 U
Methoxychlor	ug/kg	1.9 UJ	1.8 U	11 U	1.8 U	1.7 R	18 U	9.3 U	9.5 U	1.9 U	1.9 UJ	1.9 UJ	2.4 U	9.2 U	2 U	1.8 U	1.9 U
4,4'-DDD	ug/kg	0.38 UJ	0.38 U	19 U	0.37 U	0.36 R	3.7 U	1.9 U	1.9 U	1.5 U	0.39 U	0.39 U	0.48 U	1.9 U	1.9 U	0.38 U	2.4 U
4,4'-DDE	ug/kg	1.3 UJ	0.38 U	2.3 U	0.41 U	0.18 J	0.96 J	1.9 U	1.9 U	1.3 U	1.9 UJ	0.69 UJ	0.48 U	1.9 U	1.1 U	1.1 U	1.3 U
Endrin Aldehyde	ug/kg	0.38 UJ	0.38 U	5.9 U	0.37 U	0.36 R	1.8 J	1.9 U	1.9 U	0.75 U	0.64 UJ	0.61 UJ	0.48 U	1.9 U	0.61 U	0.38 U	0.62 U
Heptachlor	ug/kg	0.19 UJ	0.12 J	1.1 U	0.18 U	0.17 R	1.8 U	0.56 J	0.39 J	0.19 U	0.19 U	0.19 U	0.24 U	0.92 U	0.2 U	0.18 U	0.19 U
Endosulfan I	ug/kg	0.19 UJ	0.18 U	1.1 U	0.18 U	0.17 R	1.8 U	0.93 U	0.95 U	0.19 U	0.19 UJ	0.19 UJ	0.24 U	0.92 U	0.2 U	0.18 U	0.19 U

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

Appendix A4
Herbicides and Pesticides - Validated Data
Sediments

Sample Name		SED-033-SIV-SD-0.0-0.5	SED-034-SIV-SD-0.0-0.5	SED-035-SIV-SD-0.0-0.5	SED-036-SIV-SD-0.0-0.5	SED-037-SIV-SD-0.0-0.5	SED-038-SIV-SD-0.0-0.5	SED-039-SIV-SD-0.0-0.5	SED-040-SIV-SD-0.0-0.5
Sample Date		12/13/2010	12/20/2010	05/23/2011	12/21/2010	12/20/2010	12/21/2010	12/21/2010	12/13/2010
SDG		DE037	DX029	DE159	DE050	DX029	DE050	DE050	DE036
Start Depth		0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result
Dichlorprop	ug/kg	1.8 U	2.2 U	28 U	2.1 U	2.4 U	1.9 U	2.3 U	1.9 U
Dicamba	ug/kg	1.3 U	1.5 U	20 U	1.5 U	1.7 U	1.4 U	1.6 U	1.3 U
2,2-Dichlor-Propionic Ac	ug/kg	9.6 U	12 U	150 U	11 U	13 U	10 U	12 U	9.8 U
Dinitrobutyl Phenol	ug/kg	2.5 R	3.1 U	40 R	3 R	3.4 U	2.7 R	3.2 R	2.6 R
MCPP	ug/kg	410 U	320 U	16000 U	320 U	390	290 U	330 U	410
2,4,5-TP	ug/kg	0.18 U	0.22 U	2.8 J	0.21 U	0.24 U	0.19 U	0.23 U	0.19 U
2,4,5-T	ug/kg	0.18 U	0.22 U	2.8 U	0.21 U	0.24 U	0.19 U	0.23 U	0.19 U
MCPA	ug/kg	270 U	320 U	4100 U	320 U	350 U	290 U	460	580 U
2,4-D	ug/kg	3.8 U	4.6 U	59 U	4.6 U	5 U	3 J	4.8 U	3.9 U
2,4 DB	ug/kg	5.1 U	2.2 U	28 U	2.7 U	2.4 U	1.9 U	5.6	1.9 U
Toxaphene	ug/kg	7 U	8.5 R	11 UJ	8.3 U	9.2 U	7.6 U	8.8 U	7.2 U
Heptachlor Epoxide	ug/kg	0.18 U	0.21 R	0.27 UJ	0.21 U	0.29 U	0.19 U	0.22 U	0.18 U
Endosulfan Sulfate	ug/kg	0.36 U	0.44 R	0.56 UJ	0.43 U	0.47 U	0.39 U	0.45 U	0.37 U
Mirex	ug/kg	0.36 U	0.44 R	0.56 UJ	0.43 U	0.47 U	0.39 U	1.7 U	0.37 U
Aldrin	ug/kg	0.18 U	0.21 R	0.27 UJ	0.21 U	0.23 U	0.19 U	0.13 J	0.18 U
Alpha-BHC	ug/kg	0.16 J	0.21 R	2.7 U	0.21 UJ	0.23 U	0.19 UJ	0.22 UJ	0.18 U
Beta-BHC	ug/kg	0.18 U	0.21 R	2.7 U	0.21 U	0.23 U	0.19 U	0.22 U	0.18 U
Delta-BHC	ug/kg	0.18 U	0.21 R	2.7 U	0.26 J	0.23 U	0.19 U	2.4 U	0.18 U
Endosulfan II	ug/kg	0.36 U	0.44 R	0.56 UJ	0.43 U	0.47 U	0.39 U	0.45 U	0.37 U
4,4'-DDT	ug/kg	0.37 U	0.44 R	0.52 J	0.44 U	3.7 J	0.39 U	0.78 U	0.69 U
Endrin Ketone	ug/kg	0.36 U	0.44 R	0.56 UJ	0.43 U	0.47 U	0.39 U	0.45 U	0.37 U
Chlordane	ug/kg	3.6 U	4.4 R	7.3 UJ	4.3 U	9.6 U	3.9 U	4.5 U	4.1 U
Gamma-BHC (Lindane)	ug/kg	0.18 U	0.21 R	3.2 U	0.21 UJ	0.23 U	0.19 UJ	0.16 J	0.3 U
Dieldrin	ug/kg	0.36 U	0.44 R	0.56 UJ	0.43 U	0.49 U	0.39 U	0.45 U	0.37 U
Endrin	ug/kg	0.36 U	0.44 R	0.56 UJ	0.43 U	0.47 U	0.39 U	0.45 U	0.37 U
Methoxychlor	ug/kg	1.8 U	2.1 R	2.7 UJ	2.1 U	2.3 U	1.9 U	8.6 U	1.8 U
4,4'-DDD	ug/kg	0.36 U	0.44 R	0.56 UJ	0.43 U	0.47 U	0.39 U	0.45 U	0.37 U
4,4'-DDE	ug/kg	0.36 U	0.44 R	0.6 UJ	0.43 U	2.7 J	0.39 U	0.85 U	0.56 U
Endrin Aldehyde	ug/kg	0.36 U	0.44 R	0.56 UJ	0.43 U	1.2 U	0.39 U	0.65 U	0.37 U
Heptachlor	ug/kg	0.18 U	0.21 R	0.27 UJ	0.21 U	0.23 U	0.19 U	0.32	0.18 U
Endosulfan I	ug/kg	0.18 U	0.21 R	0.27 UJ	0.21 U	0.23 U	0.19 U	0.22 U	0.18 U

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

Appendix A5
Semivolatile Organics - Validated Data
Sediments

Sample Name		SED-001-SIV-SD-0.0-0.5	SED-002-SIV-SD-0.0-0.5	SED-003-SIV-SD-0.0-0.5	SED-004-SIV-SD-0.0-0.5	SED-005-SIV-SD-0.0-0.5	SED-006-SIV-SD-0.0-0.5	SED-007-SIV-SD-0.0-0.6	SED-008-SIV-SD-0.0-0.5	SED-009-SIV-SD-0.0-0.5	SED-010-SIV-SD-0.0-0.5	SED-011-SIV-SD-0.0-0.5	SED-012-SIV-SD-0.0-0.5	SED-013-SIV-SD-0.0-0.5	SED-014-SIV-SD-0.0-0.5
Sample Date		12/17/2010	12/21/2010	12/20/2010	12/17/2010	12/20/2010	12/17/2010	12/20/2010	12/20/2010	01/13/2011	12/22/2010	12/16/2010	12/17/2010	12/16/2010	12/17/2010
SDG		DE045	DE050	DX029	DE045	DX029	DE045	DX029	DX029	DE060	DE051	DX026	DE045	DX026	DE045
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
N-Nitrosodimethylamine	ug/kg	1.9 U	2 U	2.3 U	2.1 U	2.1 UJ	2.1 U	2 U	2.5 U	2.2 U	2 U	1.8 U	1.8 U	1.9 U	2 U
2,4-Dinitrotoluene	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Nitrobenzene	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
1,4-Dichlorobenzene	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
1,2,4-Trichlorobenzene	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
1,3-Dichlorobenzene	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Hexachlorobutadiene	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
1,2-Dichlorobenzene	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
4-Nitroaniline	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
4-Nitrophenol	ug/kg	570 U	600 U	680 U	620 U	620 U	620 U	610 U	740 U	650 U	610 U	550 U	530 U	570 U	590 U
4-Bromophenyl Phenyl Ether	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
2,4-Dimethylphenol	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
4-Methylphenol	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
4-Chloroaniline	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
3,5-Dimethylphenol	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Phenol	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Bis(2-Chloroethyl) ether	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Bis(2-Chloroethoxy) methane	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Bis(2-Ethylhexyl) phthalate (8270C)	ug/kg	--	45 J	--	--	23 J	--	--	--	440 U	130 J	95 J	--	28 J	--
Bis(2-Ethylhexyl) phthalate (8270C SIM)	ug/kg	41	--	38	8.2 J	--	54	28	69	--	--	--	13 J	--	18 J
Di-N-Octyl Phthalate (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-N-Octyl Phthalate (8270C SIM)	ug/kg	20 U	22 U	24 U	22 U	15 J	22 U	22 UJ	27 U	24 U	22 U	8.6 J	19 U	21 U	21 U
Hexachlorobenzene	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Anthracene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene (8270C SIM)	ug/kg	0.63 J	2 U	2.3 U	2.1 U	2.1 U	0.83 J	0.69 J	0.51 J	2.2 U	2 U	0.4 J	1.8 U	1.9 U	2 U
2,4-Dichlorophenol	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
1,2-Diphenylhydrazine	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Pyrene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene (8270C SIM)	ug/kg	2.8	1.3 J	1.3 J	2.1 U	2.1 J	11	6.8	3.1	3.6	1 J	3.7	1.8	3.4	2.2
Dimethylphthalate (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethylphthalate (8270C SIM)	ug/kg	20 U	22 U	24 U	22 U	22 U	22 U	22 U	27 U	24 U	22 U	20 U	19 U	21 U	21 U
Dibenzofuran	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Benzo(g,h,i)perylene (8270C)	ug/kg	--	--	--	--	--	--	22 J	--	--	--	--	--	--	--
Benzo(g,h,i)perylene (8270C SIM)	ug/kg	0.77 J	2 UJ	1 J	2.1 U	1.9 J	1.2 J	--	2 J	1.5 J	2 U	1.6 J	0.82 J	1.4 J	1 J
Indeno(1,2,3-Cd)Pyrene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-Cd)Pyrene (8270C SIM)	ug/kg	1.9 U	2 U	2.3 U	2.1 U	1.4 J	1 J	5.9 J	1.2 J	1.1 J	2 U	1.2 J	1.8 U	1.2 J	0.91 J
Benzo(b)fluoranthene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene (8270C SIM)	ug/kg	3.4	1.3 J	1.9 J	2.1 U	2.6 J	5.4	35 J	3.4	49	1.2 J	3.7	2.2	4.1	3

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

Appendix A5
Semivolatile Organics - Validated Data
Sediments

Sample Name		SED-001-SIV-SD-0.0-0.5	SED-002-SIV-SD-0.0-0.5	SED-003-SIV-SD-0.0-0.5	SED-004-SIV-SD-0.0-0.5	SED-005-SIV-SD-0.0-0.5	SED-006-SIV-SD-0.0-0.5	SED-007-SIV-SD-0.0-0.6	SED-008-SIV-SD-0.0-0.5	SED-009-SIV-SD-0.0-0.5	SED-010-SIV-SD-0.0-0.5	SED-011-SIV-SD-0.0-0.5	SED-012-SIV-SD-0.0-0.5	SED-013-SIV-SD-0.0-0.5	SED-014-SIV-SD-0.0-0.5
Sample Date		12/17/2010	12/21/2010	12/20/2010	12/17/2010	12/20/2010	12/17/2010	12/20/2010	12/20/2010	01/13/2011	12/22/2010	12/16/2010	12/17/2010	12/16/2010	12/17/2010
SDG		DE045	DE050	DX029	DE045	DX029	DE045	DX029	DX029	DE060	DE051	DX026	DE045	DX026	DE045
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Fluoranthene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene (8270C SIM)	ug/kg	4.1	1.1 J	1.5 J	2.1 U	2.6 J	16	3.8	3.2	3.3	1.1 J	4	2	3.8	2.7
Benzo(k)fluoranthene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene (8270C SIM)	ug/kg	1.3 J	2 U	2.3 U	2.1 U	0.84 J	1.7 J	2 UJ	1.2 J	2.2 U	2 U	1.1 J	0.89 J	1.3 J	1.1 J
Acenaphthylene	ug/kg	1.9 U	2 UJ	2.3 U	2.1 U	2.1 U	0.55 J	2 U	2.5 U	2.2 U	2 U	1.8 U	1.8 U	1.9 U	2 U
Chrysene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene (8270C SIM)	ug/kg	5.8	0.9 J	7.1	2.1 U	2.6 J	6.9	29	8.6	3	1.1 J	2.7	1.5 J	3	1.9 J
bis(2-Chloroisopropyl) ether	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Benzo(a)pyrene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene (8270C SIM)	ug/kg	0.96 J	2 U	2.3 U	2.1 U	1.2 J	1.7 J	10 J	1.4 J	4.5	2 U	2	1 J	2.2	1.2 J
2,4-Dinitrophenol	ug/kg	2300 U	2400 U	2700 U	2500 U	2500 U	2500 U	2400 U	3000 U	1300 U	2400 U	2200 U	2100 U	2300 U	2400 U
4,6-Dinitro-2-Methylphenol	ug/kg	570 U	600 U	680 U	620 U	620 U	620 U	610 U	740 U	650 U	610 U	550 U	530 U	570 U	590 U
Dibenzo(a,h)anthracene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene (8270C SIM)	ug/kg	1.9 U	2 U	2.3 U	2.1 U	2.1 U	2.1 U	5.7 J	2.5 U	2.2 U	2 U	1.8 U	1.8 U	1.9 U	2 U
Benzo(a)anthracene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene (8270C SIM)	ug/kg	1.3 J	2 U	2.3 U	2.1 U	2.1 U	1.5 J	2 U	1.6 J	2.2 U	2 U	1.5 J	0.95 J	1.7 J	1.2 J
Benzo(a)anthracene (8270C SIM)	ug/kg	1.3 J	2 U	2.3 U	2.1 U	2.1 U	1.5 J	2 U	1.6 J	2.2 U	2 U	1.5 J	0.95 J	1.7 J	1.2 J
4-Chloro-3-Methylphenol	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
N-Nitroso-Di-N-Propylamine	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Aniline	ug/kg	570 U	600 U	680 U	620 U	620 U	620 U	610 U	740 U	650 U	610 U	550 U	530 U	570 U	590 U
Benzoic Acid	ug/kg	570 U	600 U	680 U	620 U	620 U	620 U	610 U	740 U	650 U	610 U	550 U	530 U	570 U	590 U
Hexachloroethane	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
4-Chlorophenyl Phenylether	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Hexachlorocyclopentadiene	ug/kg	570 U	600 U	680 U	620 U	620 U	620 U	610 U	740 U	650 U	610 U	550 U	530 U	570 U	590 U
Isophorone	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Acenaphthene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene (8270C SIM)	ug/kg	1.9 U	2 U	2.3 U	2.1 U	2.1 U	2.1 U	2 U	2.5 U	2.2 U	2 U	1.8 U	1.8 U	1.9 U	2 U
Diethylphthalate (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethylphthalate (8270C SIM)	ug/kg	20 U	22 U	24 U	22 U	22 U	22 U	22 U	27 U	24 U	22 U	20 U	19 U	21 U	21 U
Di-n-Butylphthalate (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-Butylphthalate (8270C SIM)	ug/kg	20 U	22 U	24 U	22 U	22 U	22 U	22 U	27 U	24 U	22 U	20 U	19 U	21 U	21 U
Phenanthrene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene (8270C SIM)	ug/kg	6.8	0.93 J	1.3 J	2.1 U	1.6 J	14	1.4 J	4.1	1.4 J	1.8 J	2.5	1.3 J	2.1	1.4 J
Butylbenzylphthalate (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butylbenzylphthalate (8270C SIM)	ug/kg	7.1 J	22 U	17 J	22 U	22 U	13 J	14 J	9.9 J	11 J	22 U	20 U	12 J	21 U	11 J
N-Nitrosodiphenylamine	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Fluorene	ug/kg	3	2 U	2.3 U	2.1 U	2.1 U	2.1 U	2 U	2.5 U	5.8	2 U	1.8 U	11	1.9 U	1.9 J
Carbazole	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Pentachlorophenol	ug/kg	570 U	600 U	680 U	620 U	620 U	620 U	610 U	740 U	650 U	610 U	550 U	530 U	570 U	590 U

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

Appendix A5
Semivolatile Organics - Validated Data
Sediments

Sample Name		SED-001-SIV-SD-0.0-0.5	SED-002-SIV-SD-0.0-0.5	SED-003-SIV-SD-0.0-0.5	SED-004-SIV-SD-0.0-0.5	SED-005-SIV-SD-0.0-0.5	SED-006-SIV-SD-0.0-0.5	SED-007-SIV-SD-0.0-0.6	SED-008-SIV-SD-0.0-0.5	SED-009-SIV-SD-0.0-0.5	SED-010-SIV-SD-0.0-0.5	SED-011-SIV-SD-0.0-0.5	SED-012-SIV-SD-0.0-0.5	SED-013-SIV-SD-0.0-0.5	SED-014-SIV-SD-0.0-0.5
Sample Date		12/17/2010	12/21/2010	12/20/2010	12/17/2010	12/20/2010	12/17/2010	12/20/2010	12/20/2010	01/13/2011	12/22/2010	12/16/2010	12/17/2010	12/16/2010	12/17/2010
SDG		DE045	DE050	DX029	DE045	DX029	DE045	DX029	DX029	DE060	DE051	DX026	DE045	DX026	DE045
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
2,4,6-Trichlorophenol	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
2-Nitroaniline	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
2-Nitrophenol	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
1-Methylnaphthalene	ug/kg	1.8 J	2 U	2.3 U	2.1 U	2.1 U	2.1 U	2 U	2.2 J	2.2 U	2 U	1.8 U	1.8 U	1.9 U	2 U
Naphthalene	ug/kg	3.8	2.6 J	0.91 J	2.1 U	2.1 U	2.1 U	0.86 J	4.4	1 J	1 J	1.5 J	1.8 U	1.9 U	0.98 J
2-Methylnaphthalene	ug/kg	2.1	2 U	2.3 U	2.1 U	2.1 U	2.1 U	2 U	2.1 J	2.2 U	2 U	1.8 U	1.8 U	1.9 U	2 U
2-Chloronaphthalene	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
3,3`-Dichlorobenzidine	ug/kg	380 U	400 U	450 U	410 U	410 U	420 U	410 U	500 U	440 U	410 U	370 U	350 U	380 U	390 U
Benzidine	ug/kg	3800 U	4000 UJ	4500 U	4100 U	4100 UJ	4200 U	4100 U	5000 U	4400 U	4100 U	3700 U	3500 U	3800 U	3900 U
2-Methylphenol	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
2-Chlorophenol	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
2,4,5-Trichlorophenol	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
3-Nitroaniline	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U
Benzyl Alcohol	ug/kg	570 U	600 U	680 U	620 U	620 U	620 U	610 U	740 U	650 U	610 U	550 U	530 U	570 U	590 U
2,6-Dinitrotoluene	ug/kg	190 U	200 U	230 U	210 U	210 U	210 U	200 U	250 U	220 U	200 U	180 U	180 U	190 U	200 U

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

Appendix A5
Semivolatile Organics - Validated Data
Sediments

Sample Name		SED-015-SIV-SD-0.0-0.5	SED-016-SIV-SD-0.0-0.5	SED-017-SIV-SD-0.0-0.5	SED-018-SIV-SD-0.0-0.5	SED-019-SIV-SD-0.0-0.5	SED-020-SIV-SD-0.0-0.5	SED-021-SIV-SD-0.0-0.5	SED-022-SIV-SD-0.0-0.5	SED-023-SIV-SD-0.0-0.5	SED-024-SIV-SD-0.0-0.5	SED-025-SIV-SD-0.0-0.5	SED-026-SIV-SD-0.0-0.5	SED-027-SIV-SD-0.0-0.5	SED-028-SIV-SD-0.0-0.5
Sample Date		12/21/2010	12/15/2010	12/16/2010	12/15/2010	12/16/2010	12/16/2010	12/15/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	01/13/2011
SDG		DE050	DE040	DX026	DE040	DX026	DX026	DE040	DE039	DE039	DE039	DE038	DE039	DE039	DE060
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
N-Nitrosodimethylamine	ug/kg	2.2 U	1.9 U	1.9 U	1.8 U	11 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.4 U
2,4-Dinitrotoluene	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Nitrobenzene	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
1,4-Dichlorobenzene	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
1,2,4-Trichlorobenzene	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
1,3-Dichlorobenzene	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Hexachlorobutadiene	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
1,2-Dichlorobenzene	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
4-Nitroaniline	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
4-Nitrophenol	ug/kg	650 U	560 U	560 U	550 U	670 U	540 U	530 U	540 U	560 U	570 U	560 U	580 U	580 U	710 U
4-Bromophenyl Phenyl Ether	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
2,4-Dimethylphenol	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
4-Methylphenol	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
4-Chloroaniline	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
3,5-Dimethylphenol	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Phenol	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Bis(2-Chloroethyl) ether	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Bis(2-Chloroethoxy) methane	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Bis(2-Ethylhexyl) phthalate (8270C)	ug/kg	67 J	28 J	51 J	24 J	120 J	--	19 J	--	--	--	370 U	47 J	--	470 U
Bis(2-Ethylhexyl) phthalate (8270C SIM)	ug/kg	--	--	--	--	--	20 U	--	20	8.4 J	10 J	--	--	13 J	--
Di-N-Octyl Phthalate (8270C)	ug/kg	--	--	--	--	220 U	--	--	--	--	--	--	--	--	--
Di-N-Octyl Phthalate (8270C SIM)	ug/kg	23 U	20 U	20 U	20 U	--	20 U	19 U	19 U	20 U	21 U	20 U	21 U	21 U	25 U
Hexachlorobenzene	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Anthracene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene (8270C SIM)	ug/kg	2.2 U	1.9 U	1.9 U	0.65 J	6 J	1.8 U	1.8 U	0.68 J	1.9 U	1.9 U	0.42 J	1 J	1.9 U	2.4 U
2,4-Dichlorophenol	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
1,2-Diphenylhydrazine	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Pyrene (8270C)	ug/kg	--	--	--	--	47 J	--	--	--	--	--	--	--	--	--
Pyrene (8270C SIM)	ug/kg	1.5 J	12	1.9 U	5.4	--	1.8 U	1.8 U	10	1.1 J	0.95 J	2	6.1	1.9 U	2.4 U
Dimethylphthalate (8270C)	ug/kg	--	--	--	--	220 U	--	--	--	--	--	--	--	--	--
Dimethylphthalate (8270C SIM)	ug/kg	23 U	20 U	20 U	20 U	--	20 U	19 U	19 U	20 U	21 U	20 U	21 U	21 U	25 U
Dibenzofuran	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Benzo(g,h,i)perylene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene (8270C SIM)	ug/kg	2.2 U	3.1	1.9 U	1.2 J	12	1.8 U	1.8 U	1.2 J	1.9 U	1.9 U	2	1.6 J	1.9 U	2.4 U
Indeno(1,2,3-Cd)Pyrene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-Cd)Pyrene (8270C SIM)	ug/kg	2.2 U	2.9	1.9 U	1.1 J	8.6 J	1.8 U	1.8 U	1.1 J	1.9 UJ	1.9 UJ	1.9 U	1.3 J	1.9 UJ	2.4 U
Benzo(b)fluoranthene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene (8270C SIM)	ug/kg	1.8 J	12	1.9 U	4.7	35	1.8 U	1.8 U	4.7	1.3 J	1 J	1.5 J	5.6	0.94 J	25

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

Appendix A5
Semivolatile Organics - Validated Data
Sediments

Sample Name		SED-015-SIV-SD-0.0-0.5	SED-016-SIV-SD-0.0-0.5	SED-017-SIV-SD-0.0-0.5	SED-018-SIV-SD-0.0-0.5	SED-019-SIV-SD-0.0-0.5	SED-020-SIV-SD-0.0-0.5	SED-021-SIV-SD-0.0-0.5	SED-022-SIV-SD-0.0-0.5	SED-023-SIV-SD-0.0-0.5	SED-024-SIV-SD-0.0-0.5	SED-025-SIV-SD-0.0-0.5	SED-026-SIV-SD-0.0-0.5	SED-027-SIV-SD-0.0-0.5	SED-028-SIV-SD-0.0-0.5
Sample Date		12/21/2010	12/15/2010	12/16/2010	12/15/2010	12/16/2010	12/16/2010	12/15/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	01/13/2011
SDG		DE050	DE040	DX026	DE040	DX026	DX026	DE040	DE039	DE039	DE039	DE038	DE039	DE039	DE060
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Fluoranthene (8270C)	ug/kg	--	--	--	--	71 J	--	--	--	--	--	--	--	--	--
Fluoranthene (8270C SIM)	ug/kg	1.9 J	16	1.9 U	8	--	1.8 U	1.8 U	16 J	1.1 J	1.2 J	1.6 J	8.6 J	0.94 J	1.3 J
Benzo(k)fluoranthene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene (8270C SIM)	ug/kg	1.1 J	5.1	1.9 U	2	9.7 J	1.8 U	1.8 U	2.1	1.9 U	1.9 U	1.9 U	1.8 J	1.9 U	2.4 U
Acenaphthylene	ug/kg	0.47 J	1.9 U	1.9 U	1.8 U	11 U	1.8 U	1.8 U	0.72 J	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.4 U
Chrysene (8270C)	ug/kg	--	--	--	--	37 J	--	--	--	--	--	--	--	--	--
Chrysene (8270C SIM)	ug/kg	1.9 J	9	1.8 J	4.1	--	1.8 U	0.62 J	5.6 J	1.4 J	1.1 J	3.4	5.1 J	0.85 J	0.93 J
bis(2-Chloroisopropyl) ether	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Benzo(a)pyrene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene (8270C SIM)	ug/kg	2.2 U	5.6	1.9 U	2.2	16	1.8 U	1.8 U	1.4 J	1.9 U	1.9 U	1.9 U	2.3	1.9 U	1.4 J
2,4-Dinitrophenol	ug/kg	2600 U	2200 U	2300 U	2200 U	2700 U	2200 U	2100 U	2200 U	2200 U	2300 U	2200 U	2300 U	2300 U	1400 U
4,6-Dinitro-2-Methylphenol	ug/kg	650 U	560 U	560 U	550 U	670 U	540 U	530 U	540 U	560 U	570 U	560 U	580 U	580 U	710 U
Dibenzo(a,h)anthracene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene (8270C SIM)	ug/kg	2.2 U	1.9 U	1.9 U	1.8 U	11 U	1.8 U	1.8 U	1.8 UJ	1.9 UJ	1.9 UJ	1.9 U	1.9 UJ	1.9 UJ	2.4 U
Benzo(a)anthracene (8270C)	ug/kg	--	--	--	--	24 J	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene (8270C SIM)	ug/kg	2.2 U	3	1.9 U	2	--	1.8 U	1.8 U	1.2 J	1.9 U	1.9 U	1.4 J	3.1	1.9 U	2.4 U
4-Chloro-3-Methylphenol	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
N-Nitroso-Di-N-Propylamine	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Aniline	ug/kg	650 U	560 U	560 U	550 U	670 U	540 U	530 U	540 U	560 U	570 U	560 U	580 U	580 U	710 U
Benzoic Acid	ug/kg	650 U	560 U	560 U	550 U	670 U	540 U	530 U	540 U	560 U	570 U	560 U	580 U	580 U	710 U
Hexachloroethane	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
4-Chlorophenyl Phenylether	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Hexachlorocyclopentadiene	ug/kg	650 U	560 U	560 U	550 U	670 U	540 U	530 U	540 U	560 U	570 U	560 U	580 U	580 U	710 U
Isophorone	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Acenaphthene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene (8270C SIM)	ug/kg	2.2 U	1.9 U	1.9 U	1.8 U	11 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.4 U
Diethylphthalate (8270C)	ug/kg	--	--	--	--	220 U	--	--	--	--	--	--	--	--	--
Diethylphthalate (8270C SIM)	ug/kg	23 U	20 U	20 U	20 U	--	20 U	19 U	19 UJ	20 UJ	21 UJ	20 U	21 UJ	21 UJ	25 U
Di-n-Butylphthalate (8270C)	ug/kg	--	--	--	--	26 J	--	--	--	--	--	--	--	--	--
Di-n-Butylphthalate (8270C SIM)	ug/kg	23 U	20 U	20 U	20 U	--	20 U	19 U	19 UJ	20 UJ	21 UJ	7.9 J	21 UJ	21 UJ	25 U
Phenanthrene (8270C)	ug/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene (8270C SIM)	ug/kg	2.4	5.5	1.9 U	4.7	22	1.8 U	1.8 U	16	1.6 J	1.5 J	2.5	3.9	1 J	1.2 J
Butylbenzylphthalate (8270C)	ug/kg	--	--	--	--	42 J	--	--	--	--	--	--	--	--	--
Butylbenzylphthalate (8270C SIM)	ug/kg	23 U	20 U	20 U	20 U	--	20 U	19 U	19 U	20 U	21 U	8.4 J	9.1 J	21 U	25 U
N-Nitrosodiphenylamine	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Fluorene	ug/kg	2.2 U	1.9 U	1.9 U	1.8 U	11 U	1.8 U	1.8 U	1.8 UJ	1.9 UJ	1.9 UJ	6.9	1.9 UJ	1.9 UJ	4.4
Carbazole	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Pentachlorophenol	ug/kg	650 U	560 U	560 U	550 U	670 U	540 U	530 U	540 U	560 U	570 U	560 U	580 U	580 U	710 U

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

Appendix A5
Semivolatile Organics - Validated Data
Sediments

Sample Name		SED-015-SIV-SD-0.0-0.5	SED-016-SIV-SD-0.0-0.5	SED-017-SIV-SD-0.0-0.5	SED-018-SIV-SD-0.0-0.5	SED-019-SIV-SD-0.0-0.5	SED-020-SIV-SD-0.0-0.5	SED-021-SIV-SD-0.0-0.5	SED-022-SIV-SD-0.0-0.5	SED-023-SIV-SD-0.0-0.5	SED-024-SIV-SD-0.0-0.5	SED-025-SIV-SD-0.0-0.5	SED-026-SIV-SD-0.0-0.5	SED-027-SIV-SD-0.0-0.5	SED-028-SIV-SD-0.0-0.5
Sample Date		12/21/2010	12/15/2010	12/16/2010	12/15/2010	12/16/2010	12/16/2010	12/15/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	12/14/2010	01/13/2011
SDG		DE050	DE040	DX026	DE040	DX026	DX026	DE040	DE039	DE039	DE039	DE038	DE039	DE039	DE060
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
2,4,6-Trichlorophenol	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
2-Nitroaniline	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
2-Nitrophenol	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
1-Methylnaphthalene	ug/kg	1.8 J	1.9 U	1.9 U	1.8 U	11 U	1.8 U	1.8 U	1.4 J	1.9 U	1.9 U	1.2 J	1.9 U	1.9 U	2.4 U
Naphthalene	ug/kg	4.3	1.9 U	1.9 U	1.5 J	9 J	1.8 U	1.8 U	2.6	1.6 J	1.5 J	2.9	1.9 U	1.9 U	1.2 J
2-Methylnaphthalene	ug/kg	2.3	1.9 U	1.9 U	1.8 U	11 U	1.8 U	1.8 U	1.6 J	1.9 U	1.9 U	1.2 J	1.9 U	1.9 U	2.4 U
2-Chloronaphthalene	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
3,3`-Dichlorobenzidine	ug/kg	430 U	370 U	380 U	370 U	450 U	360 U	350 U	360 U	370 U	380 U	370 U	390 U	390 U	470 U
Benzidine	ug/kg	4300 U	3700 U	3800 U	3700 U	4500 U	3600 U	3500 U	3600 U	3700 U	3800 U	3700 U	3900 U	3900 U	4700 U
2-Methylphenol	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
2-Chlorophenol	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
2,4,5-Trichlorophenol	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
3-Nitroaniline	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U
Benzyl Alcohol	ug/kg	650 U	560 U	560 U	550 U	670 U	540 U	530 U	540 U	560 U	570 U	560 U	580 U	580 U	710 U
2,6-Dinitrotoluene	ug/kg	220 U	190 U	190 U	180 U	220 U	180 U	180 U	180 U	190 U	190 U	190 U	190 U	190 U	240 U

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

Appendix A5
Semivolatile Organics - Validated Data
Sediments

Sample Name		SED-029-SIV-SD-0.0-0.5	SED-030-SIV-SD-0.0-0.5	SED-031-SIV-SD-0.0-0.5	SED-032-SIV-SD-0.0-0.5	SED-033-SIV-SD-0.0-0.5	SED-034-SIV-SD-0.0-0.5	SED-035-SIV-SD-0.0-0.5	SED-036-SIV-SD-0.0-0.5	SED-037-SIV-SD-0.0-0.5	SED-038-SIV-SD-0.0-0.5	SED-039-SIV-SD-0.0-0.5	SED-040-SIV-SD-0.0-0.5
Sample Date		12/13/2010	12/13/2010	12/13/2010	12/13/2010	12/13/2010	12/20/2010	05/23/2011	12/21/2010	12/20/2010	12/21/2010	12/21/2010	12/13/2010
SDG		DE036	DE036	DE036	DE037	DE037	DX029	DE159	DE050	DX029	DE050	DE050	DE036
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
N-Nitrosodimethylamine	ug/kg	18 U	2 U	1.9 U	1.9 U	1.8 U	2.1 U	14 U	2.1 U	2.3 U	1.9 U	2.2 U	1.8 U
2,4-Dinitrotoluene	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Nitrobenzene	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
1,4-Dichlorobenzene	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
1,2,4-Trichlorobenzene	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
1,3-Dichlorobenzene	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Hexachlorobutadiene	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 UJ	210 U	230 U	190 U	220 U	180 U
1,2-Dichlorobenzene	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
4-Nitroaniline	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
4-Nitrophenol	ug/kg	550 U	600 U	560 U	570 U	530 U	640 U	830 U	630 U	700 U	570 U	660 U	550 U
4-Bromophenyl Phenyl Ether	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 UJ	210 U	230 U	190 U	220 U	180 U
2,4-Dimethylphenol	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
4-Methylphenol	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
4-Chloroaniline	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
3,5-Dimethylphenol	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Phenol	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Bis(2-Chloroethyl) ether	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Bis(2-Chloroethoxy) methane	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Bis(2-Ethylhexyl) phthalate (8270C)	ug/kg	110 J	56 J	38 J	--	--	--	550 U	48 J	35 J	30 J	33 J	360 U
Bis(2-Ethylhexyl) phthalate (8270C SIM)	ug/kg	--	--	--	30 U	19 U	29	--	--	--	--	--	--
Di-N-Octyl Phthalate (8270C)	ug/kg	--	--	--	--	--	--	280 U	--	--	--	--	--
Di-N-Octyl Phthalate (8270C SIM)	ug/kg	97 J	22 U	20 U	21 U	19 U	23 U	--	23 U	25 U	21 U	24 U	20 U
Hexachlorobenzene	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 UJ	210 U	230 U	190 U	220 U	180 U
Anthracene (8270C)	ug/kg	--	--	--	37 J	--	--	--	--	--	--	--	--
Anthracene (8270C SIM)	ug/kg	4.4 J	2 U	0.43 J	--	0.99 J	2.1 U	14 U	2.1 U	1.1 J	0.39 J	2.2 U	0.38 J
2,4-Dichlorophenol	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
1,2-Diphenylhydrazine	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Pyrene (8270C)	ug/kg	--	--	--	540	--	--	48 J	--	--	--	--	--
Pyrene (8270C SIM)	ug/kg	32	1.2 J	2.3	--	15	3.5	--	1.5 J	7.8	4.6	1.4 J	2.3
Dimethylphthalate (8270C)	ug/kg	180 U	--	--	--	--	--	280 U	--	--	--	--	--
Dimethylphthalate (8270C SIM)	ug/kg	--	22 U	20 U	21 U	19 U	23 U	--	23 U	25 U	21 U	24 U	20 U
Dibenzofuran	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Benzo(g,h,i)perylene (8270C)	ug/kg	--	--	--	500	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene (8270C SIM)	ug/kg	18 U	2 U	1.9 U	--	11	2.3	10 J	2.1 U	4.5	1.9 U	2.2 U	1.8 U
Indeno(1,2,3-Cd)Pyrene (8270C)	ug/kg	--	--	--	420	--	--	--	--	--	--	--	--
Indeno(1,2,3-Cd)Pyrene (8270C SIM)	ug/kg	18 U	2 U	1.9 U	--	10	1.8 J	8.7 J	2.1 U	3.4	1.9 U	2.2 U	1.8 U
Benzo(b)fluoranthene (8270C)	ug/kg	--	--	--	680	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene (8270C SIM)	ug/kg	27	2	2.7	--	39	5	33	2.8	13	2.4	2.7	2.1

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

Appendix A5
Semivolatile Organics - Validated Data
Sediments

Sample Name		SED-029-SIV-SD-0.0-0.5	SED-030-SIV-SD-0.0-0.5	SED-031-SIV-SD-0.0-0.5	SED-032-SIV-SD-0.0-0.5	SED-033-SIV-SD-0.0-0.5	SED-034-SIV-SD-0.0-0.5	SED-035-SIV-SD-0.0-0.5	SED-036-SIV-SD-0.0-0.5	SED-037-SIV-SD-0.0-0.5	SED-038-SIV-SD-0.0-0.5	SED-039-SIV-SD-0.0-0.5	SED-040-SIV-SD-0.0-0.5
Sample Date		12/13/2010	12/13/2010	12/13/2010	12/13/2010	12/13/2010	12/20/2010	05/23/2011	12/21/2010	12/20/2010	12/21/2010	12/21/2010	12/13/2010
SDG		DE036	DE036	DE036	DE037	DE037	DX029	DE159	DE050	DX029	DE050	DE050	DE036
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Fluoranthene (8270C)	ug/kg	--	--	--	420	--	--	53 J	--	--	--	--	--
Fluoranthene (8270C SIM)	ug/kg	47	1.4 J	3	--	14	3.7	--	2 J	8.3	6.8	2 J	3.2
Benzo(k)fluoranthene (8270C)	ug/kg	--	--	--	280	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene (8270C SIM)	ug/kg	18 U	2 U	0.85 J	--	14	2.6	9.4 J	0.96 J	4.8	1.3 J	0.91 J	0.73 J
Acenaphthylene	ug/kg	18 U	2 U	1.9 U	0.49 J	1.8 U	2.1 U	14 U	0.46 J	0.71 J	1.9 U	2.2 U	1.8 U
Chrysene (8270C)	ug/kg	--	--	--	490	--	--	--	--	--	--	--	--
Chrysene (8270C SIM)	ug/kg	25	1.6 J	2.2	--	20	4.5	20	1.4 J	10	2.8	2.2	1.8
bis(2-Chloroisopropyl) ether	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Benzo(a)pyrene (8270C)	ug/kg	--	--	--	650	--	--	--	--	--	--	--	--
Benzo(a)pyrene (8270C SIM)	ug/kg	9.6 J	2 U	1.1 J	--	25	2.3	18	1.1 J	6	1.3 J	1.1 J	0.79 J
2,4-Dinitrophenol	ug/kg	2200 U	2400 U	2200 U	2300 U	2100 U	2600 U	1700 U	2500 U	2800 U	2300 U	2700 U	2200 U
4,6-Dinitro-2-Methylphenol	ug/kg	550 U	600 U	560 U	570 U	530 U	640 U	830 U	630 U	700 U	570 U	660 U	550 U
Dibenzo(a,h)anthracene (8270C)	ug/kg	--	--	--	120 J	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene (8270C SIM)	ug/kg	18 U	2 U	1.9 U	--	3.2	2.1 U	14 U	2.1 U	2.3 U	1.9 U	2.2 U	1.8 U
Benzo(a)anthracene (8270C)	ug/kg	--	--	--	400	--	--	--	--	--	--	--	--
Benzo(a)anthracene (8270C SIM)	ug/kg	9.6 J	2 U	0.99 J	--	15	1.2 J	12 J	2.1 U	4.9	1.2 J	2.2 U	0.84 J
4-Chloro-3-Methylphenol	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
N-Nitroso-Di-N-Propylamine	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Aniline	ug/kg	550 U	600 U	560 U	570 U	530 U	640 U	830 U	630 U	700 U	570 U	660 U	550 U
Benzoic Acid	ug/kg	550 U	600 U	560 U	570 U	530 U	640 U	830 U	630 U	700 U	570 U	660 U	550 U
Hexachloroethane	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
4-Chlorophenyl Phenylether	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Hexachlorocyclopentadiene	ug/kg	550 U	600 U	560 U	570 U	530 U	640 U	830 U	630 U	700 U	570 U	660 U	550 U
Isophorone	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Acenaphthene (8270C)	ug/kg	--	--	--	43 J	--	--	--	--	--	--	--	--
Acenaphthene (8270C SIM)	ug/kg	18 U	2 U	1.9 U	--	1.8 U	2.1 U	14 U	2.1 U	2.3 U	1.9 U	2.2 U	1.8 U
Diethylphthalate (8270C)	ug/kg	180 U	--	--	--	--	--	280 U	--	--	--	--	--
Diethylphthalate (8270C SIM)	ug/kg	--	22 U	20 U	21 U	19 U	23 U	--	23 U	25 U	21 U	24 U	20 U
Di-n-Butylphthalate (8270C)	ug/kg	180 U	--	--	--	--	--	280 U	--	--	--	--	--
Di-n-Butylphthalate (8270C SIM)	ug/kg	--	7.3 J	13 J	21 U	19 U	23 U	--	23 U	25 U	15 J	24 U	20 U
Phenanthrene (8270C)	ug/kg	--	--	--	110 J	--	--	35 J	--	--	--	--	--
Phenanthrene (8270C SIM)	ug/kg	22	0.89 J	1.6 J	--	6.2	2 J	--	1.4 J	6	2.8	1.6 J	2.4
Butylbenzylphthalate (8270C)	ug/kg	31 J	--	--	--	--	32 J	280 U	56 J	--	--	--	--
Butylbenzylphthalate (8270C SIM)	ug/kg	--	22 U	7.2 J	21 U	19 U	--	--	--	25 U	21 U	17 J	20 U
N-Nitrosodiphenylamine	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Fluorene	ug/kg	18 U	2 U	2	2	1.8 U	3.4	14 U	2.1 U	3.5	1.9 U	2 J	1.8 U
Carbazole	ug/kg	180 U	200 U	190 U	24 J	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Pentachlorophenol	ug/kg	550 U	600 U	560 U	570 U	530 U	640 U	830 U	630 U	700 U	570 U	660 U	550 U

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

Appendix A5
Semivolatile Organics - Validated Data
Sediments

Sample Name		SED-029-SIV-SD-0.0-0.5	SED-030-SIV-SD-0.0-0.5	SED-031-SIV-SD-0.0-0.5	SED-032-SIV-SD-0.0-0.5	SED-033-SIV-SD-0.0-0.5	SED-034-SIV-SD-0.0-0.5	SED-035-SIV-SD-0.0-0.5	SED-036-SIV-SD-0.0-0.5	SED-037-SIV-SD-0.0-0.5	SED-038-SIV-SD-0.0-0.5	SED-039-SIV-SD-0.0-0.5	SED-040-SIV-SD-0.0-0.5
Sample Date		12/13/2010	12/13/2010	12/13/2010	12/13/2010	12/13/2010	12/20/2010	05/23/2011	12/21/2010	12/20/2010	12/21/2010	12/21/2010	12/13/2010
SDG		DE036	DE036	DE036	DE037	DE037	DX029	DE159	DE050	DX029	DE050	DE050	DE036
Start Depth		0	0	0	0	0	0	0	0	0	0	0	0
End Depth		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chemical Name	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
2,4,6-Trichlorophenol	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
2-Nitroaniline	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
2-Nitrophenol	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 UJ	210 U	230 U	190 U	220 U	180 U
1-Methylnaphthalene	ug/kg	18 U	2 U	1.9 U	1.9	0.94 J	2.1 U	14 U	2.1 U	2.6	1.9 U	2.2 U	1.8 U
Naphthalene	ug/kg	18 U	0.83 J	1.1 J	6.3	1.1 J	1.1 J	14 U	1.9 J	5.9	1.5 J	1.7 J	1.3 J
2-Methylnaphthalene	ug/kg	18 U	2 U	1.9 U	2.4	0.96 J	2.1 U	14 U	2.1 U	3.1	1.9 U	2.2 U	1.8 U
2-Chloronaphthalene	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
3,3`-Dichlorobenzidine	ug/kg	370 UJ	400 UJ	370 UJ	380 U	350 U	430 U	550 U	420 U	470 U	380 U	440 U	360 UJ
Benzidine	ug/kg	3700 U	4000 U	3700 U	3800 U	3500 U	4300 U	5500 U	4200 U	4700 U	3800 U	4400 U	3600 U
2-Methylphenol	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
2-Chlorophenol	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
2,4,5-Trichlorophenol	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
3-Nitroaniline	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U
Benzyl Alcohol	ug/kg	550 U	600 U	560 U	570 U	530 U	640 U	830 U	630 U	700 U	570 U	660 U	550 U
2,6-Dinitrotoluene	ug/kg	180 U	200 U	190 U	190 U	180 U	210 U	280 U	210 U	230 U	190 U	220 U	180 U

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

Appendix B
Laboratory Reports
(On CD)

Lancaster Laboratories

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

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

January 14, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/14/2010
Group Number: 1225222
SDG: DE036
PO Number: 1203-004-007-AL
Release Number: Tracking #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-078-SA5B-SS-0.0-0.5 Soil	6163596
SL-084-SA5B-SS-0.0-0.5 Soil	6163597
SL-076-SA5B-SS-0.0-0.5 Soil	6163598
SL-071-SA5B-SS-0.0-0.5 Soil	6163599
SL-071-SA5B-SS-0.0-0.5MS Soil	6163600
SL-071-SA5B-SS-0.0-0.5MSD Soil	6163601
SL-071-SA5B-SS-0.0-0.5DUP Soil	6163602
SL-139-SA5B-SS-0.0-0.5 Soil	6163603
SL-083-SA5B-SS-0.0-0.5 Soil	6163604
SL-074-SA5B-SS-0.0-0.5 Soil	6163605
SL-301-SA5B-SS-0.0-0.5 Soil	6163606
SL-073-SA5B-SS-0.0-0.5 Soil	6163607
SL-072-SA5B-SS-0.0-0.5 Soil	6163608
DUP04-SA5B-QC-121310 Soil	6163609
SED-029-SIV-SD-0.0-0.5 Soil	6163610
SED-031-SIV-SD-0.0-0.5 Soil	6163611
SED-030-SIV-SD-0.0-0.5 Soil	6163612
SED-040-SIV-SD-0.0-0.5 Soil	6163613
SL-086-SA5B-SS-0.0-0.5 Soil	6163614
SL-092-SA5B-SS-0.0-0.5 Soil	6163615
SL-103-SA5B-SS-0.0-0.5 Soil	6163616
SL-089-SA5B-SS-0.0-0.5 Soil	6163617
SL-236-SA5B-SS-0.0-0.5 Soil	6163618

Lancaster Laboratories

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

Analysis Report

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

ELECTRONIC COPY TO	CDM Federal Services Program	Attn: Todd Burgesser
1 COPY TO	Data Package Group	

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

Respectfully Submitted,



Chad A. Moline
Group Leader

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-078-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-078-SA5B-SS-0.0-0.5

LLI Sample # SW 6163596
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL078 SDG#: DE036-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzoic acid	65-85-0	180	U	180	550	1
04688	Benzyl alcohol	100-51-6	180	U	180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Butylbenzylphthalate	85-68-7	18	U	18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180	1
04688	4-Chloroaniline	106-47-8	74	U	74	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	Diethylphthalate	84-66-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180	1
04688	Dimethylphthalate	131-11-3	18	U	18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
04688	2,4-Dinitrophenol	51-28-5	740	U	740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	370	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	74	U	74	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	37	U	37	180	1
04688	4-Methylphenol	106-44-5	37	U	37	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	37	U	37	180	1
04688	4-Nitroaniline	100-01-6	74	U	74	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1

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

Sample Description: SL-078-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-078-SA5B-SS-0.0-0.5

LLI Sample # SW 6163596
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL078 SDG#: DE036-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	18	U	18	180	1
04688	Pentachlorophenol	87-86-5	180	U	180	550	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 3,3'-dichlorobenzidine						
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	7.4	U	7.4	18	10
10138	Acenaphthylene	208-96-8	3.7	U	3.7	18	10
10138	Anthracene	120-12-7	3.7	U	3.7	18	10
10138	Benzo(a)anthracene	56-55-3	9.7	J	7.4	18	10
10138	Benzo(a)pyrene	50-32-8	11	J	7.4	18	10
10138	Benzo(b)fluoranthene	205-99-2	19		7.4	18	10
10138	Benzo(g,h,i)perylene	191-24-2	16	J	7.4	18	10
10138	Benzo(k)fluoranthene	207-08-9	7.4	U	7.4	18	10
10138	Chrysene	218-01-9	17	J	3.7	18	10
10138	Dibenz(a,h)anthracene	53-70-3	7.4	U	7.4	18	10
10138	Fluoranthene	206-44-0	16	J	7.4	18	10
10138	Fluorene	86-73-7	7.4	U	7.4	18	10
10138	Indeno(1,2,3-cd)pyrene	193-39-5	7.4	U	7.4	18	10
10138	1-Methylnaphthalene	90-12-0	7.4	U	7.4	18	10
10138	2-Methylnaphthalene	91-57-6	7.4	U	7.4	18	10
10138	Naphthalene	91-20-3	7.4	U	7.4	18	10
10138	N-Nitrosodimethylamine	62-75-9	7.4	U	7.4	18	10
10138	Phenanthrene	85-01-8	7.4	U	7.4	18	10
10138	Pyrene	129-00-0	13	J	7.4	18	10
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0	1
10401	Dalapon	75-99-0	4.9	U	4.9	9.9	1
10401	2,4-DB	94-82-6	7.6	U	7.6	7.6	1
10401	Dicamba	1918-00-9	0.44	U	0.44	1.3	1
10401	Dinoseb	88-85-7	0.88	U	0.88	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.88	U	0.88	1.9	1
10401	MCPA	94-74-6	180	U	180	280	1
10401	MCPP (Mecoprop)	93-65-2	410	U	410	410	1
10401	2,4,5-T	93-76-5	0.090	U	0.090	0.19	1
10401	2,4,5-TP	93-72-1	0.083	U	0.083	0.19	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does						

Sample Description: SL-078-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-078-SA5B-SS-0.0-0.5

LLI Sample # SW 6163596
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL078 SDG#: DE036-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for various compounds represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.073	U	0.073	0.18	1
01363	Alpha BHC	319-84-6	0.037	U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.23		0.066	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037	U	0.037	0.18	1
01363	Chlordane	57-74-9	0.88	U	0.88	3.7	1
01363	p,p-DDD	72-54-8	0.073	U	0.073	0.37	1
01363	p,p-DDE	72-55-9	0.083	U	0.083	0.37	1
01363	p,p-DDT	50-29-3	0.16	U	0.16	0.37	1
01363	Delta BHC	319-86-8	0.040	U	0.040	0.18	1
01363	Dieldrin	60-57-1	0.073	U	0.073	0.37	1
01363	Endosulfan I	959-98-8	0.049	U	0.049	0.18	1
01363	Endosulfan II	33213-65-9	0.073	U	0.073	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.073	U	0.073	0.37	1
01363	Endrin	72-20-8	0.073	U	0.073	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.073	U	0.073	0.37	1
01363	Endrin Ketone	53494-70-5	0.073	U	0.073	0.37	1
01363	Heptachlor	76-44-8	0.066	U	0.066	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.22	U	0.22	0.22	1
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8	1
01363	Mirex	2385-85-5	0.073	U	0.073	0.37	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.3	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9	1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9	1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.9	1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9	1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9	1
10225	PCB-1254	11097-69-1	1.7	J	0.36	1.9	1
10225	PCB-1260	11096-82-5	1.1	J	0.36	1.9	1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9	1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,700		5.33	21.2	1

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

Sample Description: SL-078-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-078-SA5B-SS-0.0-0.5

LLI Sample # SW 6163596
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL078 SDG#: DE036-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
07914	Boron	7440-42-8	3.77	J	0.944	5.30	1
01650	Calcium	7440-70-2	3,770		6.50	21.2	1
01654	Iron	7439-89-6	15,200		4.99	21.2	1
01656	Lithium	7439-93-2	18.6		0.23	2.1	1
01657	Magnesium	7439-95-4	3,350		2.69	10.6	1
06958	Manganese	7439-96-5	210		0.0827	0.530	1
10145	Phosphorus	7723-14-0	280		0.594	10.6	1
01662	Potassium	7440-09-7	2,100		19.1	53.0	1
01667	Sodium	7440-23-5	367		39.5	106	1
07968	Strontium	7440-24-6	23.2		0.0657	0.530	1
06969	Tin	7440-31-5	2.09	J	1.06	10.6	1
06970	Titanium	7440-32-6	1,240		0.407	1.07	1
10146	Zirconium	7440-67-7	1.26	J	0.891	5.30	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.149	J	0.0649	0.216	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.22		0.0649	0.432	2
06126	Barium	7440-39-3	166		0.117	0.432	2
06127	Beryllium	7440-41-7	0.754		0.0173	0.108	2
06128	Cadmium	7440-43-9	0.865		0.0389	0.108	2
06131	Chromium	7440-47-3	31.0		0.130	0.432	2
06132	Cobalt	7440-48-4	11.3		0.0216	0.108	2
06133	Copper	7440-50-8	18.9		0.0713	0.432	2
06135	Lead	7439-92-1	17.7		0.0112	0.216	2
06138	Molybdenum	7439-98-7	0.657		0.0540	0.108	2
06139	Nickel	7440-02-0	21.0		0.108	0.432	2
06141	Selenium	7782-49-2	0.179	J	0.0432	0.432	2
06142	Silver	7440-22-4	1.65		0.0130	0.108	2
06145	Thallium	7440-28-0	0.313		0.0324	0.108	2
06148	Vanadium	7440-62-2	52.7		0.0238	0.108	2
06149	Zinc	7440-66-6	175		0.605	3.24	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0142	J	0.0031	0.108	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.3		0.88	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9	U	9.9	33.1	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.86	J	0.22	1.1	1

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

Sample Description: SL-078-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-078-SA5B-SS-0.0-0.5

LLI Sample # SW 6163596
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL078 SDG#: DE036-01

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	465	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.16	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	9.3	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/13/2011 20:29	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 13:23	Joseph M Gambler	10
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/23/2010 21:14	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 01:46	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 17:12	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 00:31	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 00:31	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 00:31	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 00:31	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 00:31	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 00:31	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 00:31	Tara L Snyder	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-078-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-078-SA5B-SS-0.0-0.5

LLI Sample # SW 6163596
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL078 SDG#: DE036-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 00:31	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 00:31	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 08:52	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 00:31	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 00:31	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 12:30	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 00:31	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:28	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:28	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:28	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:28	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:28	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:28	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:28	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:28	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:28	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:28	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:28	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 09:28	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:28	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:28	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:28	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 09:28	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:15	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 15:48	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 18:06	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 18:02	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102A	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402A	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403A	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-084-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5B-SS-0.0-0.5

LLI Sample # SW 6163597
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL084 SDG#: DE036-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	550	1
04688	Benzyl alcohol	100-51-6	180	U	180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	73	U	73	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	25	J	18	360	1
04688	Fluoranthene	206-44-0	22	J	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	73	U	73	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						

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

Sample Description: SL-084-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5B-SS-0.0-0.5

LLI Sample # SW 6163597
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL084 SDG#: DE036-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Pentachlorophenol	87-86-5	180	U	180	550	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	Pyrene	129-00-0	23	J	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
3,3'-dichlorobenzidine

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8	1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8	1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	2.3		0.73	1.8	1
10138	Benzo(a)pyrene	50-32-8	2.7		0.73	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	4.8		0.73	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	1.5	J	0.73	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	1.6	J	0.73	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.6	U	6.6	20	1
10138	Di-n-butylphthalate	84-74-2	6.6	U	6.6	20	1
10138	Chrysene	218-01-9	3.9		0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8	1
10138	Diethylphthalate	84-66-2	6.6	U	6.6	20	1
10138	Dimethylphthalate	131-11-3	6.6	U	6.6	20	1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.2	J	0.73	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8	1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.6	U	6.6	20	1
10138	Phenanthrene	85-01-8	0.78	J	0.73	1.8	1

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U	4.8	9.8	1
10401	2,4-DB	94-82-6	7.0	U	7.0	7.0	1
10401	Dicamba	1918-00-9	0.44	U	0.44	1.3	1
10401	Dinoseb	88-85-7	0.88	U	0.88	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.6	U	1.6	1.9	1
10401	MCPA	94-74-6	250	J	83	270	1
10401	MCPP (Mecoprop)	93-65-2	190	U	190	270	1
10401	2,4,5-T	93-76-5	0.090	U	0.090	0.19	1
10401	2,4,5-TP	93-72-1	0.082	U	0.082	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

Sample Description: SL-084-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5B-SS-0.0-0.5

LLI Sample # SW 6163597
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL084 SDG#: DE036-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for various compounds represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.072	U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.037	U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.066	U	0.066	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037	U	0.037	0.18	1
01363	Chlordane	57-74-9	0.88	U	0.88	3.7	1
01363	p,p-DDD	72-54-8	0.072	U	0.072	0.37	1
01363	p,p-DDE	72-55-9	0.072	U	0.072	0.37	1
01363	p,p-DDT	50-29-3	0.072	U	0.072	0.37	1
01363	Delta BHC	319-86-8	0.039	U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.072	U	0.072	0.37	1
01363	Endosulfan I	959-98-8	0.048	U	0.048	0.18	1
01363	Endosulfan II	33213-65-9	0.072	U	0.072	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.072	U	0.072	0.37	1
01363	Endrin	72-20-8	0.072	U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.072	U	0.072	0.37	1
01363	Endrin Ketone	53494-70-5	0.072	U	0.072	0.37	1
01363	Heptachlor	76-44-8	0.066	U	0.066	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.037	U	0.037	0.18	1
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8	1
01363	Mirex	2385-85-5	0.072	U	0.072	0.37	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.2	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9	1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9	1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.9	1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9	1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9	1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9	1
10225	PCB-1260	11096-82-5	0.36	U	0.36	1.9	1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9	1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,800		5.45	21.7	1
07914	Boron	7440-42-8	3.91	J	0.964	5.42	1
01650	Calcium	7440-70-2	3,490		6.64	21.7	1
01654	Iron	7439-89-6	23,000		5.10	21.7	1
01656	Lithium	7439-93-2	27.6		0.24	2.2	1

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

Sample Description: SL-084-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5B-SS-0.0-0.5

LLI Sample # SW 6163597
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL084 SDG#: DE036-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,950		2.75	10.8	1
06958	Manganese	7439-96-5	286		0.0845	0.542	1
10145	Phosphorus	7723-14-0	442		0.607	10.8	1
01662	Potassium	7440-09-7	3,010		19.5	54.2	1
01667	Sodium	7440-23-5	86.4	J	40.4	108	1
07968	Strontium	7440-24-6	17.1		0.0672	0.542	1
06969	Tin	7440-31-5	2.45	J	1.08	10.8	1
06970	Titanium	7440-32-6	1,360		0.412	1.08	1
10146	Zirconium	7440-67-7	1.39	J	0.910	5.42	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0656	U	0.0656	0.219	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.67		0.0656	0.438	2
06126	Barium	7440-39-3	102		0.118	0.438	2
06127	Beryllium	7440-41-7	0.588		0.0175	0.109	2
06128	Cadmium	7440-43-9	0.244		0.0394	0.109	2
06131	Chromium	7440-47-3	23.6		0.131	0.438	2
06132	Cobalt	7440-48-4	6.96		0.0219	0.109	2
06133	Copper	7440-50-8	12.2		0.0722	0.438	2
06135	Lead	7439-92-1	7.40		0.0114	0.219	2
06138	Molybdenum	7439-98-7	0.552		0.0547	0.109	2
06139	Nickel	7440-02-0	13.9		0.109	0.438	2
06141	Selenium	7782-49-2	0.203	J	0.0438	0.438	2
06142	Silver	7440-22-4	0.0361	J	0.0131	0.109	2
06145	Thallium	7440-28-0	0.311		0.0328	0.109	2
06148	Vanadium	7440-62-2	40.8		0.0241	0.109	2
06149	Zinc	7440-66-6	87.2		0.613	3.28	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0086	J	0.0030	0.106	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.2		0.88	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.8	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.41	J	0.22	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	445		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						

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

Sample Description: SL-084-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5B-SS-0.0-0.5

LLI Sample # SW 6163597
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL084 SDG#: DE036-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.66	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	8.6	0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/13/2011 21:03	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 13:57	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/23/2010 21:41	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 02:00	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 17:30	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 00:41	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 00:41	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 00:41	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 00:41	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 00:41	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 00:41	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 00:41	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 00:41	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 00:41	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:03	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 00:41	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 00:41	Tara L Snyder	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-084-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5B-SS-0.0-0.5

LLI Sample # SW 6163597
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL084 SDG#: DE036-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 12:33	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 00:41	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:31	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:31	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:31	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:31	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 09:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:31	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 09:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:17	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 16:02	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 18:30	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 18:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102A	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402A	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403A	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-076-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-076-SA5B-SS-0.0-0.5

LLI Sample # SW 6163598
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL076 SDG#: DE036-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	23	J	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

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

Sample Description: SL-076-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-076-SA5B-SS-0.0-0.5

LLI Sample # SW 6163598
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL076 SDG#: DE036-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	Pyrene	129-00-0	18	J	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
3,3'-dichlorobenzidine

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.71	U	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.71	U	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.71	U	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.71	U	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.71	U	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19	1
10138	Chrysene	218-01-9	0.35	U	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluoranthene	206-44-0	0.71	U	0.71	1.8	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
10138	Phenanthrene	85-01-8	0.71	U	0.71	1.8	1

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	3.3		0.66	1.8	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	81	U	81	270	1
10401	MCPP (Mecoprop)	93-65-2	130	J	80	270	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

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

Sample Description: SL-076-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-076-SA5B-SS-0.0-0.5

LLI Sample # SW 6163598
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL076 SDG#: DE036-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070	U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.070	U	0.070	0.36	1
01363	p,p-DDT	50-29-3	0.070	U	0.070	0.36	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070	U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.036	U	0.036	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35	U	0.35	1.8	1
10225	PCB-1260	11096-82-5	0.35	U	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,400		5.29	21.0	1
07914	Boron	7440-42-8	2.78	J	0.936	5.26	1
01650	Calcium	7440-70-2	3,280		6.45	21.0	1
01654	Iron	7439-89-6	24,100		4.96	21.0	1
01656	Lithium	7439-93-2	32.1		0.23	2.1	1
01657	Magnesium	7439-95-4	4,950		2.67	10.5	1
06958	Manganese	7439-96-5	295		0.0821	0.526	1

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

Sample Description: SL-076-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-076-SA5B-SS-0.0-0.5

LLI Sample # SW 6163598
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL076 SDG#: DE036-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
10145	Phosphorus	7723-14-0	533		0.589	10.5	1
01662	Potassium	7440-09-7	2,330		18.9	52.6	1
01667	Sodium	7440-23-5	112		39.2	105	1
07968	Strontium	7440-24-6	14.7		0.0652	0.526	1
06969	Tin	7440-31-5	2.39	J	1.05	10.5	1
06970	Titanium	7440-32-6	1,460		0.385	1.01	1
10146	Zirconium	7440-67-7	0.884	U	0.884	5.26	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0842	J	0.0638	0.213	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.92		0.0638	0.425	2
06126	Barium	7440-39-3	135		0.115	0.425	2
06127	Beryllium	7440-41-7	0.634		0.0170	0.106	2
06128	Cadmium	7440-43-9	0.211		0.0383	0.106	2
06131	Chromium	7440-47-3	31.1		0.128	0.425	2
06132	Cobalt	7440-48-4	8.21		0.0213	0.106	2
06133	Copper	7440-50-8	15.5		0.0701	0.425	2
06135	Lead	7439-92-1	7.96		0.0111	0.213	2
06138	Molybdenum	7439-98-7	0.504		0.0531	0.106	2
06139	Nickel	7440-02-0	19.7		0.106	0.425	2
06141	Selenium	7782-49-2	0.133	J	0.0425	0.425	2
06142	Silver	7440-22-4	0.0363	J	0.0128	0.106	2
06145	Thallium	7440-28-0	0.366		0.0319	0.106	2
06148	Vanadium	7440-62-2	56.0		0.0234	0.106	2
06149	Zinc	7440-66-6	108		0.595	3.19	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0066	J	0.0029	0.101	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.4		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	31.9	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	457		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						

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

Sample Description: SL-076-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-076-SA5B-SS-0.0-0.5

LLI Sample # SW 6163598
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL076 SDG#: DE036-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.49	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	5.9	0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/13/2011 21:38	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 14:32	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/23/2010 22:09	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 02:15	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 17:49	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 00:45	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 00:45	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 00:45	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 00:45	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 00:45	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 00:45	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 00:45	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 00:45	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 00:45	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:07	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 00:45	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 00:45	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 12:44	Eric L Eby	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-076-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-076-SA5B-SS-0.0-0.5

LLI Sample # SW 6163598
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL076 SDG#: DE036-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 00:45	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:40	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:40	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:40	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:40	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:40	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:40	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:40	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:40	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:40	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:40	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:40	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 09:40	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:40	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:40	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:40	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 09:40	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:18	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 16:16	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 18:54	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 18:26	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102A	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402A	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403A	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-071-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163599
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	360	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

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

Sample Description: SL-071-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163599
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
3,3'-dichlorobenzidine

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	18		0.36	1.8	1
10138	Anthracene	120-12-7	6.9		0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	73		0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	220		0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	660		7.1	18	10
10138	Benzo(g,h,i)perylene	191-24-2	190		0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	91		0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19	1
10138	Chrysene	218-01-9	450		3.6	18	10
10138	Dibenz(a,h)anthracene	53-70-3	55		0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluoranthene	206-44-0	170		0.71	1.8	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	290		0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.74	J	0.71	1.8	1
10138	Naphthalene	91-20-3	3.3		0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
10138	Phenanthrene	85-01-8	54		0.71	1.8	1
10138	Pyrene	129-00-0	85		0.71	1.8	1

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	0.66	U	0.66	1.8	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	81	U	81	270	1
10401	MCPP (Mecoprop)	93-65-2	450	U	450	450	1
10401	2,4,5-T	93-76-5	0.088	U	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

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

Sample Description: SL-071-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163599
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported.						
	Due to interfering peaks on the chromatogram, the values reported for MCPP represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.043	U	0.043	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.14	U	0.14	0.36	1
01363	p,p-DDE	72-55-9	0.070	U	0.070	0.36	1
01363	p,p-DDT	50-29-3	0.82	U	0.82	0.82	1
01363	Delta BHC	319-86-8	0.042	U	0.042	0.18	1
01363	Dieldrin	60-57-1	0.24	U	0.24	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.086	U	0.086	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.23	U	0.23	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.25	U	0.25	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.069	U	0.069	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.66	U	0.66	0.66	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	4.3		1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	6.7		0.35	1.8	1
10225	PCB-1254	11097-69-1	13		0.35	1.8	1
10225	PCB-1260	11096-82-5	8.5		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,400		5.26	20.9	1
07914	Boron	7440-42-8	4.15	J	0.931	5.23	1

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

Sample Description: SL-071-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163599
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	2,980		6.41	20.9	1
01654	Iron	7439-89-6	20,700		4.93	20.9	1
01656	Lithium	7439-93-2	23.9		0.23	2.1	1
01657	Magnesium	7439-95-4	4,490		2.66	10.5	1
06958	Manganese	7439-96-5	248		0.0816	0.523	1
10145	Phosphorus	7723-14-0	377		0.586	10.5	1
01662	Potassium	7440-09-7	2,680		18.8	52.3	1
01667	Sodium	7440-23-5	109		39.0	105	1
07968	Strontium	7440-24-6	16.7		0.0649	0.523	1
06969	Tin	7440-31-5	2.40	J	1.05	10.5	1
06970	Titanium	7440-32-6	1,130		0.386	1.02	1
10146	Zirconium	7440-67-7	1.01	J	0.879	5.23	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.102	J	0.0634	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.17		0.0634	0.423	2
06126	Barium	7440-39-3	120		0.114	0.423	2
06127	Beryllium	7440-41-7	0.693		0.0169	0.106	2
06128	Cadmium	7440-43-9	0.210		0.0380	0.106	2
06131	Chromium	7440-47-3	25.5		0.127	0.423	2
06132	Cobalt	7440-48-4	7.36		0.0211	0.106	2
06133	Copper	7440-50-8	11.9		0.0697	0.423	2
06135	Lead	7439-92-1	9.18		0.0110	0.211	2
06138	Molybdenum	7439-98-7	0.620		0.0528	0.106	2
06139	Nickel	7440-02-0	14.8		0.106	0.423	2
06141	Selenium	7782-49-2	0.0935	J	0.0423	0.423	2
06142	Silver	7440-22-4	0.241		0.0127	0.106	2
06145	Thallium	7440-28-0	0.356		0.0317	0.106	2
06148	Vanadium	7440-62-2	44.9		0.0232	0.106	2
06149	Zinc	7440-66-6	98.5		0.592	3.17	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.334		0.0030	0.103	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.4		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	32.0	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	

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

Sample Description: SL-071-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163599
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04BKG

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	462	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.67	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	6.3	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/13/2011 11:34	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 11:41	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/24/2010 01:56	Linda M Hartenstine	10
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/23/2010 22:36	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 02:29	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 18:08	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 00:08	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 00:08	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/24/2010 08:29	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 00:08	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/24/2010 08:29	Tara L Snyder	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-071-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163599
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708004	12/24/2010 08:29	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 00:08	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 00:08	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/24/2010 08:29	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 08:29	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 00:08	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 00:08	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 12:07	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 00:08	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:10	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:10	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:10	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:10	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:10	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/28/2010 15:54	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 09:10	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:19	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 15:05	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 16:53	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 18:42	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102A	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402A	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-071-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163600
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,800		18	180	1
04688	Acenaphthylene	208-96-8	1,800		18	180	1
04688	Aniline	62-53-3	870		180	530	1
04688	Anthracene	120-12-7	1,800		18	180	1
04688	Benzidine	92-87-5	1,400	J	1,200	3,600	1
04688	Benzo(a)anthracene	56-55-3	1,800		18	180	1
04688	Benzo(a)pyrene	50-32-8	1,500		18	180	1
04688	Benzo(b)fluoranthene	205-99-2	1,600		18	180	1
04688	Benzo(g,h,i)perylene	191-24-2	1,600		18	180	1
04688	Benzo(k)fluoranthene	207-08-9	1,600		18	180	1
04688	Benzoic acid	65-85-0	810		180	530	1
04688	Benzyl alcohol	100-51-6	1,600		180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	1,600		18	180	1
04688	Butylbenzylphthalate	85-68-7	1,700		18	180	1
04688	Di-n-butylphthalate	84-74-2	1,700		18	180	1
04688	Carbazole	86-74-8	1,800		18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	1,700		36	180	1
04688	4-Chloroaniline	106-47-8	1,300		71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,800		18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700		18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,600		18	180	1
04688	2-Chloronaphthalene	91-58-7	1,500		18	180	1
04688	2-Chlorophenol	95-57-8	1,700		18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,700		36	180	1
04688	Chrysene	218-01-9	1,800		18	180	1
04688	Dibenz(a,h)anthracene	53-70-3	1,600		18	180	1
04688	Dibenzofuran	132-64-9	1,800		18	180	1
04688	1,2-Dichlorobenzene	95-50-1	1,600		18	180	1
04688	1,3-Dichlorobenzene	541-73-1	1,600		18	180	1
04688	1,4-Dichlorobenzene	106-46-7	1,600		18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,300		110	360	1
04688	2,4-Dichlorophenol	120-83-2	1,800		18	180	1
04688	Diethylphthalate	84-66-2	1,700		18	180	1
04688	2,4-Dimethylphenol	105-67-9	1,700		36	180	1
04688	3,5-Dimethylphenol	108-68-9	1,800		36	180	1
04688	Dimethylphthalate	131-11-3	1,700		18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,100		180	530	1
04688	2,4-Dinitrophenol	51-28-5	1,400	J	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	1,700		36	180	1
04688	2,6-Dinitrotoluene	606-20-2	1,700		18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	1,900		18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,700		18	360	1
04688	Fluoranthene	206-44-0	1,800		18	180	1
04688	Fluorene	86-73-7	1,700		18	180	1
04688	Hexachlorobenzene	118-74-1	1,700		18	180	1
04688	Hexachlorobutadiene	87-68-3	1,700		71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	3,200		180	530	1
04688	Hexachloroethane	67-72-1	1,500		18	180	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600		18	180	1
04688	Isophorone	78-59-1	1,600		18	180	1

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

Sample Description: SL-071-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163600
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1-Methylnaphthalene	90-12-0	1,800	18	180	1
04688	2-Methylnaphthalene	91-57-6	1,700	18	180	1
04688	2-Methylphenol	95-48-7	1,700	36	180	1
04688	4-Methylphenol	106-44-5	1,600	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,700	18	180	1
04688	2-Nitroaniline	88-74-4	1,800	18	180	1
04688	3-Nitroaniline	99-09-2	1,700	36	180	1
04688	4-Nitroaniline	100-01-6	1,400	71	180	1
04688	Nitrobenzene	98-95-3	1,800	18	180	1
04688	2-Nitrophenol	88-75-5	1,600	18	180	1
04688	4-Nitrophenol	100-02-7	1,700	180	530	1
04688	N-Nitrosodimethylamine	62-75-9	1,500	36	180	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,400	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,400	18	180	1
04688	Pentachlorophenol	87-86-5	1,500	180	530	1
04688	Phenanthrene	85-01-8	1,800	18	180	1
04688	Phenol	108-95-2	1,700	18	180	1
04688	Pyrene	129-00-0	1,800	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,700	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	1,700	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	1,800	36	180	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 3,3'-dichlorobenzidine					
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	32	0.71	1.8	1
10138	Acenaphthylene	208-96-8	36	0.36	1.8	1
10138	Anthracene	120-12-7	34	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	42	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	56	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	110	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	48	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	39	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	40	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	39	6.4	19	1
10138	Chrysene	218-01-9	76	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	38	0.71	1.8	1
10138	Diethylphthalate	84-66-2	37	6.4	19	1
10138	Dimethylphthalate	131-11-3	36	6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	52	6.4	19	1

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

Sample Description: SL-071-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163600
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Fluoranthene	206-44-0	53		0.71	1.8	1
10138	Fluorene	86-73-7	33		0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	58		0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	33		0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	29		0.71	1.8	1
10138	Naphthalene	91-20-3	31		0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	35		0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	36		6.4	19	1
10138	Phenanthrene	85-01-8	39		0.71	1.8	1
10138	Pyrene	129-00-0	45		0.71	1.8	1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 8.2 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	8.4		1.3	3.8	1
10401	Dalapon	75-99-0	18		4.7	9.6	1
10401	2,4-DB	94-82-6	3.8		0.66	1.8	1
10401	Dicamba	1918-00-9	1.4		0.43	1.3	1
10401	Dinoseb	88-85-7	1.9	J	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	10		0.85	1.8	1
10401	MCPA	94-74-6	1,300		81	270	1
10401	MCPP (Mecoprop)	93-65-2	710		80	270	1
10401	2,4,5-T	93-76-5	0.54		0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.72		0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.44		0.070	0.18	1
01363	Alpha BHC	319-84-6	0.38		0.036	0.18	1
01363	Beta BHC	319-85-7	0.29		0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.45		0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.85		0.070	0.36	1
01363	p,p-DDE	72-55-9	0.84		0.070	0.36	1
01363	p,p-DDT	50-29-3	1.2		0.070	0.36	1
01363	Delta BHC	319-86-8	0.32		0.038	0.18	1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.30		0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.61		0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.65		0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.76		0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.73		0.070	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.42		0.036	0.18	1
01363	Methoxychlor	72-43-5	4.7		0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1

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

Sample Description: SL-071-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163600
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	3.9		1.1	3.5	1
10225	PCB-1016	12674-11-2	21		0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	16		0.35	1.8	1
10225	PCB-1254	11097-69-1	7.7		0.35	1.8	1
10225	PCB-1260	11096-82-5	28		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,500		5.11	20.3	1
07914	Boron	7440-42-8	186		0.905	5.08	1
01650	Calcium	7440-70-2	3,660		6.23	20.3	1
01654	Iron	7439-89-6	21,800		4.79	20.3	1
01656	Lithium	7439-93-2	124		0.22	2.0	1
01657	Magnesium	7439-95-4	5,030		2.58	10.2	1
06958	Manganese	7439-96-5	324		0.0793	0.508	1
10145	Phosphorus	7723-14-0	454		0.569	10.2	1
01662	Potassium	7440-09-7	3,890		18.3	50.8	1
01667	Sodium	7440-23-5	1,050		37.9	102	1
07968	Strontium	7440-24-6	113		0.0630	0.508	1
06969	Tin	7440-31-5	364		1.02	10.2	1
06970	Titanium	7440-32-6	1,600		0.402	1.06	1
10146	Zirconium	7440-67-7	98.5		0.854	5.08	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.611		0.0640	0.213	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	10.2		0.0640	0.427	2
06126	Barium	7440-39-3	153		0.115	0.427	2
06127	Beryllium	7440-41-7	1.94		0.0171	0.107	2
06128	Cadmium	7440-43-9	1.63		0.0384	0.107	2
06131	Chromium	7440-47-3	42.6		0.128	0.427	2

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

Sample Description: SL-071-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163600
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06132	Cobalt	7440-48-4	75.0	0.0213	0.107	2
06133	Copper	7440-50-8	26.6	0.0704	0.427	2
06135	Lead	7439-92-1	14.9	0.0111	0.213	2
06138	Molybdenum	7439-98-7	14.9	0.0534	0.107	2
06139	Nickel	7440-02-0	29.3	0.107	0.427	2
06141	Selenium	7782-49-2	1.97	0.0427	0.427	2
06142	Silver	7440-22-4	13.3	0.0128	0.107	2
06145	Thallium	7440-28-0	0.869	0.0320	0.107	2
06148	Vanadium	7440-62-2	66.7	0.0235	0.107	2
06149	Zinc	7440-66-6	122	0.598	3.20	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.459	0.0029	0.101	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	11.7	0.85	1.1	1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	505	9.6	32.0	1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	39.6	1.1	5.3	5
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3	n.a.	6.3	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/13/2011 12:08	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 12:15	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/23/2010 23:04	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 02:44	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 18:26	Lindsey K Lafferty	1

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

Sample Description: SL-071-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163600
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 00:19	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 00:19	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 00:19	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 00:19	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 00:19	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/24/2010 08:41	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 00:19	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 00:19	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 00:19	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 08:41	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 00:19	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 00:19	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 12:18	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 00:19	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:19	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:19	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:19	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:19	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:19	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:19	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:19	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:19	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:19	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:19	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:19	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/28/2010 16:01	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:19	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:19	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:19	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 09:19	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:23	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 15:34	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 17:42	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 18:58	Ashley M Adams	5
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SL-071-SA5B-SS-0.0-0.5MS Soil**
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163600
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-071-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163601
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,700		18	180	1
04688	Acenaphthylene	208-96-8	1,700		18	180	1
04688	Aniline	62-53-3	660		180	530	1
04688	Anthracene	120-12-7	1,700		18	180	1
04688	Benzidine	92-87-5	1,800	J	1,200	3,600	1
04688	Benzo(a)anthracene	56-55-3	1,800		18	180	1
04688	Benzo(a)pyrene	50-32-8	1,500		18	180	1
04688	Benzo(b)fluoranthene	205-99-2	1,600		18	180	1
04688	Benzo(g,h,i)perylene	191-24-2	1,600		18	180	1
04688	Benzo(k)fluoranthene	207-08-9	1,600		18	180	1
04688	Benzoic acid	65-85-0	590		180	530	1
04688	Benzyl alcohol	100-51-6	1,600		180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	1,700		18	180	1
04688	Butylbenzylphthalate	85-68-7	1,800		18	180	1
04688	Di-n-butylphthalate	84-74-2	1,700		18	180	1
04688	Carbazole	86-74-8	1,700		18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	1,700		36	180	1
04688	4-Chloroaniline	106-47-8	1,100		71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,700		18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700		18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,600		18	180	1
04688	2-Chloronaphthalene	91-58-7	1,400		18	180	1
04688	2-Chlorophenol	95-57-8	1,700		18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,700		36	180	1
04688	Chrysene	218-01-9	1,800		18	180	1
04688	Dibenz(a,h)anthracene	53-70-3	1,600		18	180	1
04688	Dibenzofuran	132-64-9	1,700		18	180	1
04688	1,2-Dichlorobenzene	95-50-1	1,600		18	180	1
04688	1,3-Dichlorobenzene	541-73-1	1,600		18	180	1
04688	1,4-Dichlorobenzene	106-46-7	1,600		18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,000		110	360	1
04688	2,4-Dichlorophenol	120-83-2	1,700		18	180	1
04688	Diethylphthalate	84-66-2	1,600		18	180	1
04688	2,4-Dimethylphenol	105-67-9	1,700		36	180	1
04688	3,5-Dimethylphenol	108-68-9	1,800		36	180	1
04688	Dimethylphthalate	131-11-3	1,700		18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	870		180	530	1
04688	2,4-Dinitrophenol	51-28-5	890	J	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	1,600		36	180	1
04688	2,6-Dinitrotoluene	606-20-2	1,700		18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	1,900		18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,800		18	360	1
04688	Fluoranthene	206-44-0	1,700		18	180	1
04688	Fluorene	86-73-7	1,700		18	180	1
04688	Hexachlorobenzene	118-74-1	1,700		18	180	1
04688	Hexachlorobutadiene	87-68-3	1,700		71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	3,000		180	530	1
04688	Hexachloroethane	67-72-1	1,500		18	180	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600		18	180	1
04688	Isophorone	78-59-1	1,600		18	180	1

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

Sample Description: SL-071-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163601
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1-Methylnaphthalene	90-12-0	1,700	18	180	1
04688	2-Methylnaphthalene	91-57-6	1,600	18	180	1
04688	2-Methylphenol	95-48-7	1,600	36	180	1
04688	4-Methylphenol	106-44-5	1,600	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,600	18	180	1
04688	2-Nitroaniline	88-74-4	1,700	18	180	1
04688	3-Nitroaniline	99-09-2	1,500	36	180	1
04688	4-Nitroaniline	100-01-6	1,100	71	180	1
04688	Nitrobenzene	98-95-3	1,700	18	180	1
04688	2-Nitrophenol	88-75-5	1,500	18	180	1
04688	4-Nitrophenol	100-02-7	1,600	180	530	1
04688	N-Nitrosodimethylamine	62-75-9	1,500	36	180	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,500	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,500	18	180	1
04688	Pentachlorophenol	87-86-5	1,300	180	530	1
04688	Phenanthrene	85-01-8	1,800	18	180	1
04688	Phenol	108-95-2	1,700	18	180	1
04688	Pyrene	129-00-0	1,900	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,700	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	1,600	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	1,700	36	180	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 3,3'-dichlorobenzidine					
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	32	0.71	1.8	1
10138	Acenaphthylene	208-96-8	36	0.36	1.8	1
10138	Anthracene	120-12-7	34	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	41	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	63	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	140	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	53	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	43	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	42	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	39	6.4	19	1
10138	Chrysene	218-01-9	97	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	38	0.71	1.8	1
10138	Diethylphthalate	84-66-2	38	6.4	19	1
10138	Dimethylphthalate	131-11-3	36	6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	53	6.4	19	1

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

Sample Description: SL-071-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163601
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Fluoranthene	206-44-0	54		0.71	1.8	1
10138	Fluorene	86-73-7	34		0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	67		0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	33		0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	30		0.71	1.8	1
10138	Naphthalene	91-20-3	31		0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	36		0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	35		6.4	19	1
10138	Phenanthrene	85-01-8	40		0.71	1.8	1
10138	Pyrene	129-00-0	45		0.71	1.8	1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 8.2 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	6.2		1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	7.2		0.66	1.8	1
10401	Dicamba	1918-00-9	1.1	J	0.43	1.3	1
10401	Dinoseb	88-85-7	2.3	J	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	10		0.85	1.8	1
10401	MCPA	94-74-6	1,500		81	270	1
10401	MCPP (Mecoprop)	93-65-2	540		80	270	1
10401	2,4,5-T	93-76-5	0.27		0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.81		0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.31		0.070	0.18	1
01363	Alpha BHC	319-84-6	0.41		0.036	0.18	1
01363	Beta BHC	319-85-7	0.42		0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.44		0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.79		0.070	0.36	1
01363	p,p-DDE	72-55-9	0.68		0.070	0.36	1
01363	p,p-DDT	50-29-3	1.7		0.070	0.36	1
01363	Delta BHC	319-86-8	0.43		0.038	0.18	1
01363	Dieldrin	60-57-1	0.90		0.070	0.36	1
01363	Endosulfan I	959-98-8	0.29		0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.43		0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.81		0.070	0.36	1
01363	Endrin	72-20-8	0.79		0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.60		0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.48		0.070	0.36	1
01363	Heptachlor	76-44-8	0.41		0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.34		0.036	0.18	1
01363	Methoxychlor	72-43-5	4.3		0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1

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

Sample Description: SL-071-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163601
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	5.3		1.1	3.5	1
10225	PCB-1016	12674-11-2	20		0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	23		0.35	1.8	1
10225	PCB-1254	11097-69-1	18		0.35	1.8	1
10225	PCB-1260	11096-82-5	31		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,600		5.37	21.3	1
07914	Boron	7440-42-8	195		0.950	5.34	1
01650	Calcium	7440-70-2	3,790		6.54	21.3	1
01654	Iron	7439-89-6	22,000		5.03	21.3	1
01656	Lithium	7439-93-2	128		0.23	2.1	1
01657	Magnesium	7439-95-4	4,960		2.71	10.7	1
06958	Manganese	7439-96-5	322		0.0832	0.534	1
10145	Phosphorus	7723-14-0	472		0.598	10.7	1
01662	Potassium	7440-09-7	3,960		19.2	53.4	1
01667	Sodium	7440-23-5	1,100		39.8	107	1
07968	Strontium	7440-24-6	118		0.0662	0.534	1
06969	Tin	7440-31-5	382		1.07	10.7	1
06970	Titanium	7440-32-6	1,510		0.406	1.07	1
10146	Zirconium	7440-67-7	103		0.896	5.34	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.343		0.0616	0.205	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	9.57		0.0616	0.410	2
06126	Barium	7440-39-3	145		0.111	0.410	2
06127	Beryllium	7440-41-7	1.85		0.0164	0.103	2
06128	Cadmium	7440-43-9	1.64		0.0369	0.103	2
06131	Chromium	7440-47-3	41.7		0.123	0.410	2

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

Sample Description: SL-071-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163601
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		mg/kg	mg/kg	mg/kg	
06132	Cobalt	7440-48-4	71.8	0.0205	0.103	2
06133	Copper	7440-50-8	27.4	0.0677	0.410	2
06135	Lead	7439-92-1	15.1	0.0107	0.205	2
06138	Molybdenum	7439-98-7	14.4	0.0513	0.103	2
06139	Nickel	7440-02-0	29.5	0.103	0.410	2
06141	Selenium	7782-49-2	1.88	0.0410	0.410	2
06142	Silver	7440-22-4	13.5	0.0123	0.103	2
06145	Thallium	7440-28-0	0.852	0.0308	0.103	2
06148	Vanadium	7440-62-2	65.5	0.0226	0.103	2
06149	Zinc	7440-66-6	131	0.575	3.08	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.467	0.0029	0.102	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.3	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/13/2011 12:42	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 12:50	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/23/2010 23:31	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 02:58	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 18:45	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 00:23	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 00:23	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 00:23	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 00:23	Tara L Snyder	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-071-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163601
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 00:23	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/24/2010 08:45	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 00:23	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 00:23	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 00:23	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 08:45	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 00:23	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 00:23	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 12:22	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 00:23	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/28/2010 16:04	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:22	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:22	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:22	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:22	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:22	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:22	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:22	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:22	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:22	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:22	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/28/2010 16:04	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:22	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:22	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:22	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 09:22	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:24	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-071-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163602
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,600		5.37	21.3	1
07914	Boron	7440-42-8	4.06	J	0.950	5.34	1
01650	Calcium	7440-70-2	3,160		6.54	21.3	1
01654	Iron	7439-89-6	20,900		5.03	21.3	1
01656	Lithium	7439-93-2	23.3		0.23	2.1	1
01657	Magnesium	7439-95-4	4,690		2.71	10.7	1
06958	Manganese	7439-96-5	259		0.0832	0.534	1
10145	Phosphorus	7723-14-0	392		0.598	10.7	1
01662	Potassium	7440-09-7	2,510		19.2	53.4	1
01667	Sodium	7440-23-5	114		39.8	107	1
07968	Strontium	7440-24-6	18.6		0.0662	0.534	1
06969	Tin	7440-31-5	2.34	J	1.07	10.7	1
06970	Titanium	7440-32-6	1,300		0.402	1.06	1
10146	Zirconium	7440-67-7	1.71	J	0.896	5.34	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0616	U	0.0616	0.205	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.75		0.0616	0.410	2
06126	Barium	7440-39-3	159		0.111	0.410	2
06127	Beryllium	7440-41-7	1.07		0.0164	0.103	2
06128	Cadmium	7440-43-9	0.271		0.0369	0.103	2
06131	Chromium	7440-47-3	27.6		0.123	0.410	2
06132	Cobalt	7440-48-4	9.14		0.0205	0.103	2
06133	Copper	7440-50-8	16.7		0.0677	0.410	2
06135	Lead	7439-92-1	13.4		0.0107	0.205	2
06138	Molybdenum	7439-98-7	0.588		0.0513	0.103	2
06139	Nickel	7440-02-0	20.2		0.103	0.410	2
06141	Selenium	7782-49-2	0.102	J	0.0410	0.410	2
06142	Silver	7440-22-4	0.388		0.0123	0.103	2
06145	Thallium	7440-28-0	0.335		0.0308	0.103	2
06148	Vanadium	7440-62-2	51.7		0.0226	0.103	2
06149	Zinc	7440-66-6	116		0.575	3.08	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.281		0.0030	0.104	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	32.0	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.35	J	0.21	1.1	1

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

Sample Description: SL-071-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163602
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	472	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.60	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3	n.a.	6.3	0.50	0.50	1
11626	28a Moisture Content by 160.3	n.a.	6.5	0.50	0.50	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 00:15	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 00:15	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 00:15	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 00:15	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 00:15	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/24/2010 08:37	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 00:15	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 00:15	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 00:15	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 08:37	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 00:15	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 00:15	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 12:14	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 00:15	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:16	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:16	Choon Y Tian	2

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-071-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163602
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL071 SDG#: DE036-04DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/28/2010 15:59	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 09:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:22	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 15:19	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 17:17	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11004243201A	01/05/2011 20:02	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102A	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402A	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-139-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-139-SA5B-SS-0.0-0.5

LLI Sample # SW 6163603
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL139 SDG#: DE036-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	570	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U	190	570	1
04688	Benzyl alcohol	100-51-6	190	U	190	570	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190	1
04688	4-Chloroaniline	106-47-8	76	U	76	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570	1
04688	2,4-Dinitrophenol	51-28-5	760	U	760	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	380	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	38	U	38	190	1
04688	4-Methylphenol	106-44-5	38	U	38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	38	U	38	190	1
04688	4-Nitroaniline	100-01-6	76	U	76	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	570	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	570	1

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

Sample Description: SL-139-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-139-SA5B-SS-0.0-0.5

LLI Sample # SW 6163603
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL139 SDG#: DE036-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
3,3'-dichlorobenzidine

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9	1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9	1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.89	J	0.76	1.9	1
10138	Benzo(a)pyrene	50-32-8	1.2	J	0.76	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	2.7		0.76	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	1.0	J	0.76	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.96	J	0.76	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.8	U	6.8	21	1
10138	Di-n-butylphthalate	84-74-2	9.6	J	6.8	21	1
10138	Chrysene	218-01-9	2.7		0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9	1
10138	Diethylphthalate	84-66-2	6.8	U	6.8	21	1
10138	Dimethylphthalate	131-11-3	6.8	U	6.8	21	1
10138	Fluoranthene	206-44-0	2.3		0.76	1.9	1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.3	J	0.76	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9	1
10138	Naphthalene	91-20-3	0.76	U	0.76	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.8	U	6.8	21	1
10138	Phenanthrene	85-01-8	1.1	J	0.76	1.9	1
10138	Pyrene	129-00-0	1.9		0.76	1.9	1

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1	1
10401	Dalapon	75-99-0	5.0	U	5.0	10	1
10401	2,4-DB	94-82-6	0.71	U	0.71	1.9	1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4	1
10401	Dinoseb	88-85-7	0.91	U	0.91	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.91	U	0.91	1.9	1
10401	MCPA	94-74-6	260	U	260	280	1
10401	MCPP (Mecoprop)	93-65-2	350		85	280	1
10401	2,4,5-T	93-76-5	0.093	U	0.093	0.19	1
10401	2,4,5-TP	93-72-1	0.085	U	0.085	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

Sample Description: SL-139-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-139-SA5B-SS-0.0-0.5

LLI Sample # SW 6163603
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL139 SDG#: DE036-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported.						
	Due to interfering peaks on the chromatogram, the values reported for MCPA represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.75	U	0.75	1.9	10
01363	Alpha BHC	319-84-6	0.39	U	0.39	1.9	10
01363	Beta BHC	319-85-7	0.68	U	0.68	1.9	10
01363	Gamma BHC - Lindane	58-89-9	0.39	U	0.39	1.9	10
01363	Chlordane	57-74-9	9.1	U	9.1	39	10
01363	p,p-DDD	72-54-8	2.6	U	2.6	3.9	10
01363	p,p-DDE	72-55-9	21	U	21	21	10
01363	p,p-DDT	50-29-3	48	U	48	48	50
01363	Delta BHC	319-86-8	0.41	U	0.41	1.9	10
01363	Dieldrin	60-57-1	14	U	14	14	10
01363	Endosulfan I	959-98-8	0.50	U	0.50	1.9	10
01363	Endosulfan II	33213-65-9	4.8	U	4.8	4.8	10
01363	Endosulfan Sulfate	1031-07-8	0.75	U	0.75	3.9	10
01363	Endrin	72-20-8	0.75	U	0.75	3.9	10
01363	Endrin Aldehyde	7421-93-4	3.8	U	3.8	3.9	10
01363	Endrin Ketone	53494-70-5	0.75	U	0.75	3.9	10
01363	Heptachlor	76-44-8	0.68	U	0.68	1.9	10
01363	Heptachlor Epoxide	1024-57-3	4.3	U	4.3	4.3	10
01363	Methoxychlor	72-43-5	3.9	U	3.9	19	10
01363	Mirex	2385-85-5	0.75	U	0.75	3.9	10
01363	Toxaphene	8001-35-2	25	U	25	75	10
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
	Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	57	U	57	190	50
10225	Aroclor 5442	12642-23-8	57	U	57	190	50
10225	Aroclor 5460	11126-42-4	57	U	57	190	50
10225	PCB-1016	12674-11-2	19	U	19	97	50
10225	PCB-1221	11104-28-2	28	U	28	97	50
10225	PCB-1232	11141-16-5	30	U	30	97	50
10225	PCB-1242	53469-21-9	28	U	28	97	50
10225	PCB-1248	12672-29-6	19	U	19	97	50
10225	PCB-1254	11097-69-1	500		19	97	50
10225	PCB-1260	11096-82-5	19	U	19	97	50
10225	PCB-1262	37324-23-5	19	U	19	97	50
10225	PCB-1268	11100-14-4	19	U	19	97	50
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-139-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-139-SA5B-SS-0.0-0.5

LLI Sample # SW 6163603
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL139 SDG#: DE036-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,700		5.62	22.3	1
07914	Boron	7440-42-8	5.59		0.994	5.58	1
01650	Calcium	7440-70-2	4,280		6.84	22.3	1
01654	Iron	7439-89-6	25,200		5.26	22.3	1
01656	Lithium	7439-93-2	27.4		0.25	2.2	1
01657	Magnesium	7439-95-4	5,180		2.84	11.2	1
06958	Manganese	7439-96-5	349		0.0871	0.558	1
10145	Phosphorus	7723-14-0	331		0.625	11.2	1
01662	Potassium	7440-09-7	2,940		20.1	55.8	1
01667	Sodium	7440-23-5	266		41.6	112	1
07968	Strontium	7440-24-6	22.8		0.0692	0.558	1
06969	Tin	7440-31-5	2.72	J	1.12	11.2	1
06970	Titanium	7440-32-6	1,430		0.433	1.14	1
10146	Zirconium	7440-67-7	3.64	J	0.938	5.58	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0657	U	0.0657	0.219	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.15		0.0657	0.438	2
06126	Barium	7440-39-3	150		0.118	0.438	2
06127	Beryllium	7440-41-7	0.869		0.0175	0.110	2
06128	Cadmium	7440-43-9	0.200		0.0394	0.110	2
06131	Chromium	7440-47-3	30.4		0.131	0.438	2
06132	Cobalt	7440-48-4	8.20		0.0219	0.110	2
06133	Copper	7440-50-8	13.1		0.0723	0.438	2
06135	Lead	7439-92-1	9.99		0.0114	0.219	2
06138	Molybdenum	7439-98-7	1.26		0.0548	0.110	2
06139	Nickel	7440-02-0	18.1		0.110	0.438	2
06141	Selenium	7782-49-2	0.152	J	0.0438	0.438	2
06142	Silver	7440-22-4	0.0876	J	0.0131	0.110	2
06145	Thallium	7440-28-0	0.336		0.0329	0.110	2
06148	Vanadium	7440-62-2	56.0		0.0241	0.110	2
06149	Zinc	7440-66-6	77.3		0.613	3.29	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.829		0.0032	0.112	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	7.1		0.91	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.2	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.59	J	0.23	1.1	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-139-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-139-SA5B-SS-0.0-0.5

LLI Sample # SW 6163603
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL139 SDG#: DE036-05

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	465	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.99	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	12.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/13/2011 22:13	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/24/2010 02:29	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/23/2010 23:59	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 03:12	Jamie L Brillhart	10
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	01/07/2011 20:46	Jamie L Brillhart	50
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 19:03	Lindsey K Lafferty	50
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 00:49	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 00:49	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 00:49	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 00:49	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 00:49	Tara L Snyder	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-139-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-139-SA5B-SS-0.0-0.5

LLI Sample # SW 6163603
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL139 SDG#: DE036-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 00:49	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 00:49	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 00:49	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 00:49	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:11	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 00:49	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 00:49	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 12:48	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 00:49	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:43	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:43	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:43	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:43	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:43	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:43	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:43	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:43	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:43	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:43	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:43	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 09:43	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:43	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:43	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:43	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 09:43	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:28	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 16:30	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 19:42	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 20:26	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102A	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402A	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-083-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-083-SA5B-SS-0.0-0.5

LLI Sample # SW 6163604
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL083 SDG#: DE036-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	72	U	72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U	720	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	360	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U	72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	72	U	72	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	540	1

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

Sample Description: SL-083-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-083-SA5B-SS-0.0-0.5

LLI Sample # SW 6163604
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL083 SDG#: DE036-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
3,3'-dichlorobenzidine

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	1.1	J	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8	1
10138	Anthracene	120-12-7	2.1		0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	9.4		0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	13		0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	31		0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	7.2		0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	11		0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20	1
10138	Di-n-butylphthalate	84-74-2	8.3	J	6.5	20	1
10138	Chrysene	218-01-9	16		0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	2.0		0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20	1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20	1
10138	Fluoranthene	206-44-0	28		0.72	1.8	1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	5.7		0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.72	U	0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.72	U	0.72	1.8	1
10138	Naphthalene	91-20-3	0.78	J	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20	1
10138	Phenanthrene	85-01-8	14		0.72	1.8	1
10138	Pyrene	129-00-0	19		0.72	1.8	1

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	3.1	U	3.1	3.9	1
10401	Dalapon	75-99-0	4.8	U	4.8	9.8	1
10401	2,4-DB	94-82-6	60	U	60	60	5
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	4.3	U	4.3	13	5
10401	2,4-DP (Dichlorprop)	120-36-5	1.2	U	1.2	1.8	1
10401	MCPA	94-74-6	350	U	350	350	1
10401	MCPP (Mecoprop)	93-65-2	81	U	81	270	1
10401	2,4,5-T	93-76-5	0.089	U	0.089	0.18	1
10401	2,4,5-TP	93-72-1	0.081	U	0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

Sample Description: SL-083-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-083-SA5B-SS-0.0-0.5

LLI Sample # SW 6163604
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL083 SDG#: DE036-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported.						
	Due to interfering peaks on the chromatogram, the values reported for various compounds represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	14	U	14	36	200
01363	Alpha BHC	319-84-6	7.4	U	7.4	36	200
01363	Beta BHC	319-85-7	13	U	13	36	200
01363	Gamma BHC - Lindane	58-89-9	12	U	12	36	200
01363	Chlordane	57-74-9	170	U	170	740	200
01363	p,p-DDD	72-54-8	14	U	14	74	200
01363	p,p-DDE	72-55-9	500	U	500	500	200
01363	p,p-DDT	50-29-3	230	U	230	230	200
01363	Delta BHC	319-86-8	7.8	U	7.8	36	200
01363	Dieldrin	60-57-1	99	U	99	99	200
01363	Endosulfan I	959-98-8	9.5	U	9.5	36	200
01363	Endosulfan II	33213-65-9	14	U	14	74	200
01363	Endosulfan Sulfate	1031-07-8	14	U	14	74	200
01363	Endrin	72-20-8	14	U	14	74	200
01363	Endrin Aldehyde	7421-93-4	25	U	25	74	200
01363	Endrin Ketone	53494-70-5	14	U	14	74	200
01363	Heptachlor	76-44-8	98	U	98	98	200
01363	Heptachlor Epoxide	1024-57-3	780	U	780	780	1000
01363	Methoxychlor	72-43-5	74	U	74	360	200
01363	Mirex	2385-85-5	14	U	14	74	200
01363	Toxaphene	8001-35-2	480	U	480	1,400	200
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
	Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1,100	U	1,100	3,600	1000
10225	Aroclor 5442	12642-23-8	1,100	U	1,100	3,600	1000
10225	Aroclor 5460	11126-42-4	1,100	U	1,100	3,600	1000
10225	PCB-1016	12674-11-2	360	U	360	1,800	1000
10225	PCB-1221	11104-28-2	540	U	540	1,800	1000
10225	PCB-1232	11141-16-5	560	U	560	1,800	1000
10225	PCB-1242	53469-21-9	540	U	540	1,800	1000
10225	PCB-1248	12672-29-6	18,000		360	1,800	1000
10225	PCB-1254	11097-69-1	2,300		360	1,800	1000
10225	PCB-1260	11096-82-5	360	U	360	1,800	1000
10225	PCB-1262	37324-23-5	360	U	360	1,800	1000
10225	PCB-1268	11100-14-4	360	U	360	1,800	1000
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-083-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-083-SA5B-SS-0.0-0.5

LLI Sample # SW 6163604
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL083 SDG#: DE036-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,500		5.20	20.7	1
07914	Boron	7440-42-8	4.46	J	0.919	5.16	1
01650	Calcium	7440-70-2	4,660		6.33	20.7	1
01654	Iron	7439-89-6	25,600		4.87	20.7	1
01656	Lithium	7439-93-2	22.3		0.23	2.1	1
01657	Magnesium	7439-95-4	5,240		2.62	10.3	1
06958	Manganese	7439-96-5	312		0.0806	0.516	1
10145	Phosphorus	7723-14-0	691		0.578	10.3	1
01662	Potassium	7440-09-7	3,850		18.6	51.6	1
01667	Sodium	7440-23-5	95.9	J	38.5	103	1
07968	Strontium	7440-24-6	30.0		0.0640	0.516	1
06969	Tin	7440-31-5	2.24	J	1.03	10.3	1
06970	Titanium	7440-32-6	1,320		0.412	1.08	1
10146	Zirconium	7440-67-7	1.82	J	0.868	5.16	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.249		0.0632	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	10.2		0.0632	0.421	2
06126	Barium	7440-39-3	172		0.114	0.421	2
06127	Beryllium	7440-41-7	0.859		0.0168	0.105	2
06128	Cadmium	7440-43-9	1.69		0.0379	0.105	2
06131	Chromium	7440-47-3	41.4		0.126	0.421	2
06132	Cobalt	7440-48-4	10.0		0.0211	0.105	2
06133	Copper	7440-50-8	25.9		0.0695	0.421	2
06135	Lead	7439-92-1	77.7		0.0110	0.211	2
06138	Molybdenum	7439-98-7	0.958		0.0527	0.105	2
06139	Nickel	7440-02-0	23.0		0.105	0.421	2
06141	Selenium	7782-49-2	0.176	J	0.0421	0.421	2
06142	Silver	7440-22-4	0.243		0.0126	0.105	2
06145	Thallium	7440-28-0	0.343		0.0316	0.105	2
06148	Vanadium	7440-62-2	66.1		0.0232	0.105	2
06149	Zinc	7440-66-6	170		1.47	7.90	5
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0414	J	0.0029	0.101	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.1		0.87	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.5	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.91	J	0.22	1.1	1

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

Sample Description: SL-083-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-083-SA5B-SS-0.0-0.5

LLI Sample # SW 6163604
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL083 SDG#: DE036-06

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	499	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.40	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	7.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/13/2011 22:47	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 15:39	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/24/2010 00:27	John W Perkins	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/29/2010 11:06	John W Perkins	5
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 03:41	Jamie L Brillhart	200
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	01/07/2011 21:01	Jamie L Brillhart	1000
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 19:22	Lindsey K Lafferty	1000
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 00:53	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 00:53	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 00:53	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 00:53	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 00:53	Tara L Snyder	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-083-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-083-SA5B-SS-0.0-0.5

LLI Sample # SW 6163604
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL083 SDG#: DE036-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 00:53	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 00:53	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 00:53	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 00:53	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:15	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 00:53	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 00:53	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 12:52	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 00:53	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:46	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:46	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:46	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:46	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:46	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:46	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:46	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:46	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:46	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:46	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:46	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 09:46	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:46	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:46	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:46	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/28/2010 16:09	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:30	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 16:45	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 20:06	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 20:42	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102A	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402A	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-074-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SS-0.0-0.5

LLI Sample # SW 6163605
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL074 SDG#: DE036-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	73	U	73	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	41	J	18	360	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	73	U	73	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	540	1

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

Sample Description: SL-074-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SS-0.0-0.5

LLI Sample # SW 6163605
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL074 SDG#: DE036-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
3,3'-dichlorobenzidine

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	1.5	J	0.73	1.8	1
10138	Acenaphthylene	208-96-8	0.58	J	0.36	1.8	1
10138	Anthracene	120-12-7	3.6		0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	22		0.73	1.8	1
10138	Benzo(a)pyrene	50-32-8	26		0.73	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	40		0.73	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	14		0.73	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	11		0.73	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20	1
10138	Di-n-butylphthalate	84-74-2	9.0	J	6.5	20	1
10138	Chrysene	218-01-9	40		0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	3.7		0.73	1.8	1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20	1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20	1
10138	Fluoranthene	206-44-0	36		0.73	1.8	1
10138	Fluorene	86-73-7	0.80	J	0.73	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	11		0.73	1.8	1
10138	1-Methylnaphthalene	90-12-0	1.2	J	0.73	1.8	1
10138	2-Methylnaphthalene	91-57-6	1.8	J	0.73	1.8	1
10138	Naphthalene	91-20-3	1.7	J	0.73	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20	1
10138	Phenanthrene	85-01-8	18		0.73	1.8	1
10138	Pyrene	129-00-0	32		0.73	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.9	J	1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U	4.8	9.8	1
10401	2,4-DB	94-82-6	7.7	U	7.7	7.7	1
10401	Dicamba	1918-00-9	0.44	U	0.44	1.3	1
10401	Dinoseb	88-85-7	0.87	U	0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87	U	0.87	1.9	1
10401	MCPA	94-74-6	230	J	83	270	1
10401	MCPP (Mecoprop)	93-65-2	82	U	82	270	1
10401	2,4,5-T	93-76-5	0.27		0.089	0.19	1
10401	2,4,5-TP	93-72-1	0.082	U	0.082	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

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

Sample Description: SL-074-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SS-0.0-0.5

LLI Sample # SW 6163605
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL074 SDG#: DE036-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported.						
	Due to interfering peaks on the chromatogram, the values reported for 2,4-DB represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.072	U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.037	U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.74	J	0.33	0.90	5
01363	Gamma BHC - Lindane	58-89-9	0.037	U	0.037	0.18	1
01363	Chlordane	57-74-9	0.87	U	0.87	3.7	1
01363	p,p-DDD	72-54-8	0.072	U	0.072	0.37	1
01363	p,p-DDE	72-55-9	0.072	U	0.072	0.37	1
01363	p,p-DDT	50-29-3	0.41	U	0.41	0.41	1
01363	Delta BHC	319-86-8	0.039	U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.13	U	0.13	0.37	1
01363	Endosulfan I	959-98-8	0.064	U	0.064	0.18	1
01363	Endosulfan II	33213-65-9	0.072	U	0.072	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.072	U	0.072	0.37	1
01363	Endrin	72-20-8	0.072	U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.15	U	0.15	0.37	1
01363	Endrin Ketone	53494-70-5	0.072	U	0.072	0.37	1
01363	Heptachlor	76-44-8	0.065	U	0.065	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.037	U	0.037	0.18	1
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8	1
01363	Mirex	2385-85-5	0.072	U	0.072	0.37	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.2	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
	Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	5.4	U	5.4	18	5
10225	Aroclor 5442	12642-23-8	5.4	U	5.4	18	5
10225	Aroclor 5460	11126-42-4	8.9	J	5.4	18	5
10225	PCB-1016	12674-11-2	1.8	U	1.8	9.3	5
10225	PCB-1221	11104-28-2	2.7	U	2.7	9.3	5
10225	PCB-1232	11141-16-5	2.8	U	2.8	9.3	5
10225	PCB-1242	53469-21-9	2.7	U	2.7	9.3	5
10225	PCB-1248	12672-29-6	4.5	J	1.8	9.3	5
10225	PCB-1254	11097-69-1	4.8	J	1.8	9.3	5
10225	PCB-1260	11096-82-5	9.9		1.8	9.3	5
10225	PCB-1262	37324-23-5	1.8	U	1.8	9.3	5
10225	PCB-1268	11100-14-4	1.8	U	1.8	9.3	5
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: SL-074-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SS-0.0-0.5

LLI Sample # SW 6163605
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL074 SDG#: DE036-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,200		5.22	20.7	1
07914	Boron	7440-42-8	4.88	J	0.923	5.19	1
01650	Calcium	7440-70-2	4,110		6.36	20.7	1
01654	Iron	7439-89-6	24,100		4.89	20.7	1
01656	Lithium	7439-93-2	29.6		0.23	2.1	1
01657	Magnesium	7439-95-4	4,980		2.64	10.4	1
06958	Manganese	7439-96-5	279		0.0809	0.519	1
10145	Phosphorus	7723-14-0	390		0.581	10.4	1
01662	Potassium	7440-09-7	2,950		18.7	51.9	1
01667	Sodium	7440-23-5	108		38.7	104	1
07968	Strontium	7440-24-6	22.2		0.0643	0.519	1
06969	Tin	7440-31-5	2.34	J	1.04	10.4	1
06970	Titanium	7440-32-6	1,350		0.402	1.06	1
10146	Zirconium	7440-67-7	1.49	J	0.871	5.19	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0647	U	0.0647	0.216	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.82		0.0647	0.431	2
06126	Barium	7440-39-3	140		0.116	0.431	2
06127	Beryllium	7440-41-7	0.723		0.0173	0.108	2
06128	Cadmium	7440-43-9	0.305		0.0388	0.108	2
06131	Chromium	7440-47-3	29.6		0.129	0.431	2
06132	Cobalt	7440-48-4	7.36		0.0216	0.108	2
06133	Copper	7440-50-8	16.8		0.0712	0.431	2
06135	Lead	7439-92-1	12.5		0.0112	0.216	2
06138	Molybdenum	7439-98-7	0.725		0.0539	0.108	2
06139	Nickel	7440-02-0	17.7		0.108	0.431	2
06141	Selenium	7782-49-2	0.315	J	0.0431	0.431	2
06142	Silver	7440-22-4	0.405		0.0129	0.108	2
06145	Thallium	7440-28-0	0.325		0.0324	0.108	2
06148	Vanadium	7440-62-2	49.9		0.0237	0.108	2
06149	Zinc	7440-66-6	100		0.604	3.24	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0204	J	0.0030	0.104	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.1		0.87	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.7	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.51	J	0.22	1.1	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-074-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SS-0.0-0.5

LLI Sample # SW 6163605
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL074 SDG#: DE036-07

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	467	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.75	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	8.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/13/2011 23:22	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 16:14	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/24/2010 00:54	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 03:56	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	01/07/2011 21:14	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 19:41	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 00:57	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 00:57	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 00:57	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 00:57	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 00:57	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 00:57	Tara L Snyder	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-074-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SS-0.0-0.5

LLI Sample # SW 6163605
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL074 SDG#: DE036-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 00:57	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 00:57	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 00:57	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:19	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 00:57	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 00:57	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 12:56	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 00:57	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:50	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:50	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:50	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 09:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:50	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 09:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:31	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 17:27	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 20:30	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 20:50	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102A	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402A	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-301-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SS-0.0-0.5

LLI Sample # SW 6163606
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL301 SDG#: DE036-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzo(a)pyrene	50-32-8	22	J	18	180	1
04688	Benzo(b)fluoranthene	205-99-2	29	J	18	180	1
04688	Benzo(g,h,i)perylene	191-24-2	18	J	18	180	1
04688	Benzoic acid	65-85-0	180	U	180	550	1
04688	Benzyl alcohol	100-51-6	180	U	180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180	1
04688	4-Chloroaniline	106-47-8	73	U	73	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	26	J	18	370	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	37	U	37	180	1
04688	4-Methylphenol	106-44-5	37	U	37	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	37	U	37	180	1
04688	4-Nitroaniline	100-01-6	73	U	73	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1

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

Sample Description: SL-301-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SS-0.0-0.5

LLI Sample # SW 6163606
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL301 SDG#: DE036-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	550	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	Pyrene	129-00-0	21	J	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 3,3'-dichlorobenzidine						
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8	1
10138	Acenaphthylene	208-96-8	0.40	J	0.37	1.8	1
10138	Anthracene	120-12-7	1.1	J	0.37	1.8	1
10138	Benzo(a)anthracene	56-55-3	9.2		0.73	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	4.9		0.73	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.6	U	6.6	20	1
10138	Di-n-butylphthalate	84-74-2	7.4	J	6.6	20	1
10138	Chrysene	218-01-9	17		0.37	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.7	J	0.73	1.8	1
10138	Diethylphthalate	84-66-2	6.6	U	6.6	20	1
10138	Dimethylphthalate	131-11-3	6.6	U	6.6	20	1
10138	Fluoranthene	206-44-0	16		0.73	1.8	1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	5.0		0.73	1.8	1
10138	1-Methylnaphthalene	90-12-0	1.2	J	0.73	1.8	1
10138	2-Methylnaphthalene	91-57-6	1.5	J	0.73	1.8	1
10138	Naphthalene	91-20-3	1.5	J	0.73	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.6	U	6.6	20	1
10138	Phenanthrene	85-01-8	6.3		0.73	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U	4.8	9.9	1
10401	2,4-DB	94-82-6	13	U	13	13	1
10401	Dicamba	1918-00-9	0.44	U	0.44	1.3	1
10401	Dinoseb	88-85-7	0.88	U	0.88	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.88	U	0.88	1.9	1
10401	MCPA	94-74-6	830	U	830	2,700	1
10401	MCPP (Mecoprop)	93-65-2	500	U	500	500	1
10401	2,4,5-T	93-76-5	0.28		0.090	0.19	1
10401	2,4,5-TP	93-72-1	0.082	U	0.082	0.19	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does						

Sample Description: SL-301-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SS-0.0-0.5

LLI Sample # SW 6163606
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL301 SDG#: DE036-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for MCPP and 2,4-DB represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.36	U	0.36	0.91	5
01363	Alpha BHC	319-84-6	0.19	U	0.19	0.91	5
01363	Beta BHC	319-85-7	0.33	U	0.33	0.91	5
01363	Gamma BHC - Lindane	58-89-9	0.19	U	0.19	0.91	5
01363	Chlordane	57-74-9	4.4	U	4.4	19	5
01363	p,p-DDD	72-54-8	0.36	U	0.36	1.9	5
01363	p,p-DDE	72-55-9	3.9	U	3.9	3.9	5
01363	p,p-DDT	50-29-3	4.5	U	4.5	4.5	5
01363	Delta BHC	319-86-8	0.20	U	0.20	0.91	5
01363	Dieldrin	60-57-1	1.5	U	1.5	1.9	5
01363	Endosulfan I	959-98-8	0.24	U	0.24	0.91	5
01363	Endosulfan II	33213-65-9	0.36	U	0.36	1.9	5
01363	Endosulfan Sulfate	1031-07-8	0.36	U	0.36	1.9	5
01363	Endrin	72-20-8	0.36	U	0.36	1.9	5
01363	Endrin Aldehyde	7421-93-4	1.0	U	1.0	1.9	5
01363	Endrin Ketone	53494-70-5	0.36	U	0.36	1.9	5
01363	Heptachlor	76-44-8	0.55	U	0.55	0.91	5
01363	Heptachlor Epoxide	1024-57-3	6.5	U	6.5	6.5	5
01363	Methoxychlor	72-43-5	1.9	U	1.9	9.1	5
01363	Mirex	2385-85-5	0.36	U	0.36	1.9	5
01363	Toxaphene	8001-35-2	12	U	12	36	5
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	11	U	11	36	10
10225	Aroclor 5442	12642-23-8	11	U	11	36	10
10225	Aroclor 5460	11126-42-4	110		11	36	10
10225	PCB-1016	12674-11-2	3.6	U	3.6	19	10
10225	PCB-1221	11104-28-2	5.5	U	5.5	19	10
10225	PCB-1232	11141-16-5	5.7	U	5.7	19	10
10225	PCB-1242	53469-21-9	5.5	U	5.5	19	10
10225	PCB-1248	12672-29-6	83		3.6	19	10
10225	PCB-1254	11097-69-1	100		3.6	19	10
10225	PCB-1260	11096-82-5	3.6	U	3.6	19	10
10225	PCB-1262	37324-23-5	3.6	U	3.6	19	10
10225	PCB-1268	11100-14-4	3.6	U	3.6	19	10
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						

Sample Description: SL-301-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SS-0.0-0.5

LLI Sample # SW 6163606
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL301 SDG#: DE036-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,100		5.35	21.3	1
07914	Boron	7440-42-8	4.44	J	0.947	5.32	1
01650	Calcium	7440-70-2	4,310		6.53	21.3	1
01654	Iron	7439-89-6	28,700		5.01	21.3	1
01656	Lithium	7439-93-2	34.3		0.23	2.1	1
01657	Magnesium	7439-95-4	6,140		2.70	10.6	1
06958	Manganese	7439-96-5	397		0.0830	0.532	1
10145	Phosphorus	7723-14-0	495		0.596	10.6	1
01662	Potassium	7440-09-7	3,500		19.2	53.2	1
01667	Sodium	7440-23-5	133		39.7	106	1
07968	Strontium	7440-24-6	23.7		0.0660	0.532	1
06969	Tin	7440-31-5	3.24	J	1.06	10.6	1
06970	Titanium	7440-32-6	1,500		0.405	1.06	1
10146	Zirconium	7440-67-7	1.67	J	0.894	5.32	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.120	J	0.0633	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.79		0.0633	0.422	2
06126	Barium	7440-39-3	167		0.114	0.422	2
06127	Beryllium	7440-41-7	0.915		0.0169	0.105	2
06128	Cadmium	7440-43-9	0.902		0.0380	0.105	2
06131	Chromium	7440-47-3	38.1		0.127	0.422	2
06132	Cobalt	7440-48-4	9.42		0.0211	0.105	2
06133	Copper	7440-50-8	24.2		0.0696	0.422	2
06135	Lead	7439-92-1	15.3		0.0110	0.211	2
06138	Molybdenum	7439-98-7	0.834		0.0527	0.105	2
06139	Nickel	7440-02-0	24.4		0.105	0.422	2
06141	Selenium	7782-49-2	0.164	J	0.0422	0.422	2
06142	Silver	7440-22-4	3.63		0.0127	0.105	2
06145	Thallium	7440-28-0	0.335		0.0316	0.105	2
06148	Vanadium	7440-62-2	62.7		0.0232	0.105	2
06149	Zinc	7440-66-6	168		1.48	7.91	5
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.149		0.0031	0.109	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6		0.88	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9	U	9.9	32.9	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1	1

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

Sample Description: SL-301-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SS-0.0-0.5

LLI Sample # SW 6163606
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL301 SDG#: DE036-08

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	461	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.48	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	8.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/13/2011 23:56	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 16:48	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/24/2010 01:22	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 04:10	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 19:59	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1

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

Sample Description: SL-301-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SS-0.0-0.5

LLI Sample # SW 6163606
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL301 SDG#: DE036-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:23	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:00	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:01	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 09:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/28/2010 16:11	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:32	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 17:41	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 20:54	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 21:06	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102A	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402A	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-073-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SS-0.0-0.5

LLI Sample # SW 6163607
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL073 SDG#: DE036-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Butylbenzylphthalate	85-68-7	18	U	18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	70	U	70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	Diethylphthalate	84-66-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	Dimethylphthalate	131-11-3	18	U	18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	70	U	70	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1

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

Sample Description: SL-073-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SS-0.0-0.5

LLI Sample # SW 6163607
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL073 SDG#: DE036-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	18	U	18	180	1
04688	Pentachlorophenol	87-86-5	180	U	180	530	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 3,3'-dichlorobenzidine						
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	7.0	U	7.0	18	10
10138	Acenaphthylene	208-96-8	3.5	U	3.5	18	10
10138	Anthracene	120-12-7	3.5	U	3.5	18	10
10138	Benzo(a)anthracene	56-55-3	13	J	7.0	18	10
10138	Benzo(a)pyrene	50-32-8	16	J	7.0	18	10
10138	Benzo(b)fluoranthene	205-99-2	36		7.0	18	10
10138	Benzo(g,h,i)perylene	191-24-2	24		7.0	18	10
10138	Benzo(k)fluoranthene	207-08-9	7.0	U	7.0	18	10
10138	Chrysene	218-01-9	20		3.5	18	10
10138	Dibenz(a,h)anthracene	53-70-3	7.0	U	7.0	18	10
10138	Fluoranthene	206-44-0	23		7.0	18	10
10138	Fluorene	86-73-7	7.0	U	7.0	18	10
10138	Indeno(1,2,3-cd)pyrene	193-39-5	12	J	7.0	18	10
10138	1-Methylnaphthalene	90-12-0	7.0	U	7.0	18	10
10138	2-Methylnaphthalene	91-57-6	7.0	U	7.0	18	10
10138	Naphthalene	91-20-3	7.0	U	7.0	18	10
10138	N-Nitrosodimethylamine	62-75-9	7.0	U	7.0	18	10
10138	Phenanthrene	85-01-8	7.0	U	7.0	18	10
10138	Pyrene	129-00-0	17	J	7.0	18	10
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5	1
10401	2,4-DB	94-82-6	4.1		0.65	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8	1
10401	MCPA	94-74-6	640		80	260	1
10401	MCPP (Mecoprop)	93-65-2	160	U	160	260	1
10401	2,4,5-T	93-76-5	0.086	U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does						

Sample Description: SL-073-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SS-0.0-0.5

LLI Sample # SW 6163607
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL073 SDG#: DE036-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for MCPP represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.17	1
01363	Beta BHC	319-85-7	0.063	U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.17	1
01363	Chlordane	57-74-9	1.1	U	1.1	3.6	1
01363	p,p-DDD	72-54-8	0.069	U	0.069	0.36	1
01363	p,p-DDE	72-55-9	0.071	U	0.071	0.36	1
01363	p,p-DDT	50-29-3	0.91	U	0.91	0.91	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.35	U	0.35	0.36	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069	U	0.069	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.069	U	0.069	0.36	1
01363	Endrin	72-20-8	0.069	U	0.069	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.47	U	0.47	0.47	1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.36	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.036	U	0.036	0.17	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.7	1
01363	Mirex	2385-85-5	0.069	U	0.069	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	5.6		1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	3.0		0.35	1.8	1
10225	PCB-1254	11097-69-1	6.8		0.35	1.8	1
10225	PCB-1260	11096-82-5	15		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,400		5.08	20.2	1

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

Sample Description: SL-073-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SS-0.0-0.5

LLI Sample # SW 6163607
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL073 SDG#: DE036-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
07914	Boron	7440-42-8	4.90	J	0.899	5.05	1
01650	Calcium	7440-70-2	3,190		6.19	20.2	1
01654	Iron	7439-89-6	20,400		4.76	20.2	1
01656	Lithium	7439-93-2	23.2		0.22	2.0	1
01657	Magnesium	7439-95-4	4,130		2.57	10.1	1
06958	Manganese	7439-96-5	266		0.0788	0.505	1
10145	Phosphorus	7723-14-0	318		0.566	10.1	1
01662	Potassium	7440-09-7	2,790		18.2	50.5	1
01667	Sodium	7440-23-5	87.5	J	37.7	101	1
07968	Strontium	7440-24-6	20.1		0.0626	0.505	1
06969	Tin	7440-31-5	2.03	J	1.01	10.1	1
06970	Titanium	7440-32-6	1,370		0.391	1.03	1
10146	Zirconium	7440-67-7	1.75	J	0.848	5.05	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0768	J	0.0618	0.206	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.02		0.0618	0.412	2
06126	Barium	7440-39-3	153		0.111	0.412	2
06127	Beryllium	7440-41-7	0.721		0.0165	0.103	2
06128	Cadmium	7440-43-9	0.291		0.0371	0.103	2
06131	Chromium	7440-47-3	28.2		0.124	0.412	2
06132	Cobalt	7440-48-4	7.93		0.0206	0.103	2
06133	Copper	7440-50-8	14.5		0.0680	0.412	2
06135	Lead	7439-92-1	11.2		0.0107	0.206	2
06138	Molybdenum	7439-98-7	0.956		0.0515	0.103	2
06139	Nickel	7440-02-0	17.9		0.103	0.412	2
06141	Selenium	7782-49-2	0.138	J	0.0412	0.412	2
06142	Silver	7440-22-4	0.298		0.0124	0.103	2
06145	Thallium	7440-28-0	0.393		0.0309	0.103	2
06148	Vanadium	7440-62-2	49.7		0.0227	0.103	2
06149	Zinc	7440-66-6	105		0.577	3.09	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0132	J	0.0028	0.0993	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.87	J	0.84	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.5	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.47	J	0.21	1.1	1

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

Sample Description: SL-073-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SS-0.0-0.5

LLI Sample # SW 6163607
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL073 SDG#: DE036-09

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	494	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.47	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	4.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 00:31	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 17:22	Joseph M Gambler	10
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/31/2010 02:29	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 04:25	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 20:18	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-073-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SS-0.0-0.5

LLI Sample # SW 6163607
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL073 SDG#: DE036-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:26	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:04	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:04	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 09:56	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 09:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:33	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 17:56	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 21:18	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 21:22	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102A	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402A	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-072-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-072-SA5B-SS-0.0-0.5

LLI Sample # SW 6163608
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL072 SDG#: DE036-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	70	U	70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	39	J	18	350	1
04688	Fluoranthene	206-44-0	20	J	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	70	U	70	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						

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

Sample Description: SL-072-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-072-SA5B-SS-0.0-0.5

LLI Sample # SW 6163608
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL072 SDG#: DE036-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Pentachlorophenol	87-86-5	180	U	180	530	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	Pyrene	129-00-0	25	J	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
3,3'-dichlorobenzidine

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.62	J	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	3.3		0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	3.1		0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	4.3		0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.96	J	0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	1.9		0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19	1
10138	Chrysene	218-01-9	4.1		0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluorene	86-73-7	0.70	U	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.96	J	0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.70	U	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.70	U	0.70	1.8	1
10138	Naphthalene	91-20-3	0.70	U	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	3.1		0.70	1.8	1

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	J	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5	1
10401	2,4-DB	94-82-6	7.1	U	7.1	7.1	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8	1
10401	MCPA	94-74-6	80	U	80	260	1
10401	MCPP (Mecoprop)	93-65-2	250	U	250	260	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

Sample Description: SL-072-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-072-SA5B-SS-0.0-0.5

LLI Sample # SW 6163608
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL072 SDG#: DE036-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported.						
	Due to interfering peaks on the chromatogram, the values reported for MCPP and 2,4-DB represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.063	U	0.063	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.84	U	0.84	3.6	1
01363	p,p-DDD	72-54-8	0.070	U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.38	U	0.38	0.38	1
01363	p,p-DDT	50-29-3	0.26	U	0.26	0.36	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.075	U	0.075	0.36	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.092	U	0.092	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070	U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.036	U	0.036	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.1	U	2.1	7.0	2
10225	Aroclor 5442	12642-23-8	2.1	U	2.1	7.0	2
10225	Aroclor 5460	11126-42-4	27		2.1	7.0	2
10225	PCB-1016	12674-11-2	0.70	U	0.70	3.6	2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.6	2
10225	PCB-1232	11141-16-5	1.1	U	1.1	3.6	2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.6	2
10225	PCB-1248	12672-29-6	0.70	U	0.70	3.6	2
10225	PCB-1254	11097-69-1	6.8		0.70	3.6	2
10225	PCB-1260	11096-82-5	22		0.70	3.6	2
10225	PCB-1262	37324-23-5	0.70	U	0.70	3.6	2
10225	PCB-1268	11100-14-4	0.70	U	0.70	3.6	2
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,800		5.06	20.1	1
07914	Boron	7440-42-8	5.12		0.895	5.03	1

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

Sample Description: SL-072-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-072-SA5B-SS-0.0-0.5

LLI Sample # SW 6163608
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL072 SDG#: DE036-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	3,240		6.16	20.1	1
01654	Iron	7439-89-6	20,200		4.74	20.1	1
01656	Lithium	7439-93-2	23.2		0.22	2.0	1
01657	Magnesium	7439-95-4	4,220		2.55	10.1	1
06958	Manganese	7439-96-5	279		0.0784	0.503	1
10145	Phosphorus	7723-14-0	403		0.563	10.1	1
01662	Potassium	7440-09-7	2,890		18.1	50.3	1
01667	Sodium	7440-23-5	98.9	J	37.5	101	1
07968	Strontium	7440-24-6	19.2		0.0624	0.503	1
06969	Tin	7440-31-5	2.20	J	1.01	10.1	1
06970	Titanium	7440-32-6	1,310		0.390	1.03	1
10146	Zirconium	7440-67-7	1.32	J	0.845	5.03	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0917	J	0.0609	0.203	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.07		0.0609	0.406	2
06126	Barium	7440-39-3	135		0.110	0.406	2
06127	Beryllium	7440-41-7	0.676		0.0162	0.102	2
06128	Cadmium	7440-43-9	0.411		0.0366	0.102	2
06131	Chromium	7440-47-3	25.1		0.122	0.406	2
06132	Cobalt	7440-48-4	7.26		0.0203	0.102	2
06133	Copper	7440-50-8	12.6		0.0670	0.406	2
06135	Lead	7439-92-1	13.0		0.0106	0.203	2
06138	Molybdenum	7439-98-7	0.694		0.0508	0.102	2
06139	Nickel	7440-02-0	14.5		0.102	0.406	2
06141	Selenium	7782-49-2	0.114	J	0.0406	0.406	2
06142	Silver	7440-22-4	3.17		0.0122	0.102	2
06145	Thallium	7440-28-0	0.281		0.0305	0.102	2
06148	Vanadium	7440-62-2	44.3		0.0223	0.102	2
06149	Zinc	7440-66-6	111		0.569	3.05	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0873	J	0.0029	0.100	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.2		0.84	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.7	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.36	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-072-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-072-SA5B-SS-0.0-0.5

LLI Sample # SW 6163608
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL072 SDG#: DE036-10

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	434	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.72	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.3	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 01:05	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 17:56	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/31/2010 02:56	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 04:39	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 20:36	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-072-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-072-SA5B-SS-0.0-0.5

LLI Sample # SW 6163608
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL072 SDG#: DE036-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:30	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:07	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:08	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 09:59	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 09:59	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 09:59	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 09:59	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:35	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201A	01/04/2011 18:10	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204A	12/29/2010 21:42	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 21:46	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201A	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204A	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: DUP04-SA5B-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP04-SA5B-QC-121310

LLI Sample # SW 6163609
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

DUP04 SDG#: DE036-11FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzo(a)anthracene	56-55-3	30	J	18	180	1
04688	Benzo(a)pyrene	50-32-8	33	J	18	180	1
04688	Benzo(b)fluoranthene	205-99-2	60	J	18	180	1
04688	Benzo(g,h,i)perylene	191-24-2	33	J	18	180	1
04688	Benzo(k)fluoranthene	207-08-9	24	J	18	180	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Chrysene	218-01-9	46	J	18	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	29	J	18	350	1
04688	Fluoranthene	206-44-0	64	J	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	27	J	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1

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

Sample Description: DUP04-SA5B-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP04-SA5B-QC-121310

LLI Sample # SW 6163609
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

DUP04 SDG#: DE036-11FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1
04688	Phenanthrene	85-01-8	23	J	18	180	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	Pyrene	129-00-0	70	J	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 3,3'-dichlorobenzidine						
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.75	J	0.35	1.8	1
10138	Anthracene	120-12-7	1.6	J	0.35	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.7	J	6.4	19	1
10138	Dibenz(a,h)anthracene	53-70-3	2.6		0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.74	J	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.87	J	0.71	1.8	1
10138	Naphthalene	91-20-3	1.1	J	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	0.66	U	0.66	1.8	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	81	U	81	270	1
10401	MCPP (Mecoprop)	93-65-2	520	U	520	520	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory						

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

Sample Description: DUP04-SA5B-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP04-SA5B-QC-121310

LLI Sample # SW 6163609
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

DUP04 SDG#: DE036-11FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported.						
	Due to interfering peaks on the chromatogram, the values reported for MCPP represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070	U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.36	U	0.36	0.36	1
01363	p,p-DDT	50-29-3	0.49	U	0.49	0.49	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.15	U	0.15	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.13	U	0.13	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	2.0	U	2.0	2.0	5
01363	Heptachlor Epoxide	1024-57-3	1.2	U	1.2	1.2	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
	Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	2.6	J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	2.1		0.35	1.8	1
10225	PCB-1260	11096-82-5	3.9		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	

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

Sample Description: DUP04-SA5B-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP04-SA5B-QC-121310

LLI Sample # SW 6163609
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

DUP04 SDG#: DE036-11FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,200		5.35	21.3	1
07914	Boron	7440-42-8	5.32		0.946	5.31	1
01650	Calcium	7440-70-2	3,040		6.51	21.3	1
01654	Iron	7439-89-6	20,900		5.01	21.3	1
01656	Lithium	7439-93-2	23.4		0.23	2.1	1
01657	Magnesium	7439-95-4	4,460		2.70	10.6	1
06958	Manganese	7439-96-5	248		0.0829	0.531	1
10145	Phosphorus	7723-14-0	394		0.595	10.6	1
01662	Potassium	7440-09-7	2,580		19.1	53.1	1
01667	Sodium	7440-23-5	102	J	39.6	106	1
07968	Strontium	7440-24-6	17.2		0.0659	0.531	1
06969	Tin	7440-31-5	2.42	J	1.06	10.6	1
06970	Titanium	7440-32-6	1,150		0.385	1.01	1
10146	Zirconium	7440-67-7	1.10	J	0.893	5.31	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.136	J	0.0625	0.208	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.83		0.0625	0.417	2
06126	Barium	7440-39-3	135		0.113	0.417	2
06127	Beryllium	7440-41-7	0.771		0.0167	0.104	2
06128	Cadmium	7440-43-9	0.382		0.0375	0.104	2
06131	Chromium	7440-47-3	28.8		0.125	0.417	2
06132	Cobalt	7440-48-4	9.00		0.0208	0.104	2
06133	Copper	7440-50-8	15.1		0.0688	0.417	2
06135	Lead	7439-92-1	11.3		0.0108	0.208	2
06138	Molybdenum	7439-98-7	0.750		0.0521	0.104	2
06139	Nickel	7440-02-0	17.1		0.104	0.417	2
06141	Selenium	7782-49-2	0.152	J	0.0417	0.417	2
06142	Silver	7440-22-4	1.22		0.0125	0.104	2
06145	Thallium	7440-28-0	0.324		0.0313	0.104	2
06148	Vanadium	7440-62-2	50.3		0.0229	0.104	2
06149	Zinc	7440-66-6	128		0.583	3.13	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.227		0.0030	0.106	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.3		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	31.9	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.76	J	0.21	1.1	1

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

Sample Description: DUP04-SA5B-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP04-SA5B-QC-121310

LLI Sample # SW 6163609
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

DUP04 SDG#: DE036-11FD

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	454	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.34	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 01:39	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 18:29	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 10:19	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 04:54	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	01/07/2011 21:29	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 20:55	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: DUP04-SA5B-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP04-SA5B-QC-121310

LLI Sample # SW 6163609
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

DUP04 SDG#: DE036-11FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:34	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:11	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:12	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:02	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:02	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:02	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:02	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:36	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 19:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/29/2010 23:18	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 22:02	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-029-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163610
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD029 SDG#: DE036-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzoic acid	65-85-0	180	U	180	550	1
04688	Benzyl alcohol	100-51-6	180	U	180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Butylbenzylphthalate	85-68-7	31	J	18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180	1
04688	4-Chloroaniline	106-47-8	74	U	74	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	Diethylphthalate	84-66-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180	1
04688	Dimethylphthalate	131-11-3	18	U	18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
04688	2,4-Dinitrophenol	51-28-5	740	U	740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	110	J	18	370	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	74	U	74	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	37	U	37	180	1
04688	4-Methylphenol	106-44-5	37	U	37	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	37	U	37	180	1
04688	4-Nitroaniline	100-01-6	74	U	74	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1

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

Sample Description: SED-029-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163610
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD029 SDG#: DE036-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	550	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 3,3'-dichlorobenzidine						
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	7.4	U	7.4	18	10
10138	Acenaphthylene	208-96-8	3.7	U	3.7	18	10
10138	Anthracene	120-12-7	4.4	J	3.7	18	10
10138	Benzo(a)anthracene	56-55-3	9.6	J	7.4	18	10
10138	Benzo(a)pyrene	50-32-8	9.6	J	7.4	18	10
10138	Benzo(b)fluoranthene	205-99-2	27		7.4	18	10
10138	Benzo(g,h,i)perylene	191-24-2	7.4	U	7.4	18	10
10138	Benzo(k)fluoranthene	207-08-9	7.4	U	7.4	18	10
10138	Chrysene	218-01-9	25		3.7	18	10
10138	Dibenz(a,h)anthracene	53-70-3	7.4	U	7.4	18	10
10138	Fluoranthene	206-44-0	47		7.4	18	10
10138	Fluorene	86-73-7	7.4	U	7.4	18	10
10138	Indeno(1,2,3-cd)pyrene	193-39-5	7.4	U	7.4	18	10
10138	1-Methylnaphthalene	90-12-0	7.4	U	7.4	18	10
10138	2-Methylnaphthalene	91-57-6	7.4	U	7.4	18	10
10138	Naphthalene	91-20-3	7.4	U	7.4	18	10
10138	N-Nitrosodimethylamine	62-75-9	7.4	U	7.4	18	10
10138	Di-n-octylphthalate	117-84-0	97	J	66	200	10
10138	Phenanthrene	85-01-8	22		7.4	18	10
10138	Pyrene	129-00-0	32		7.4	18	10
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	2.0	U	2.0	4.0	1
10401	Dalapon	75-99-0	4.9	U	4.9	10	1
10401	2,4-DB	94-82-6	0.69	U	0.69	1.9	1
10401	Dicamba	1918-00-9	0.44	U	0.44	1.3	1
10401	Dinoseb	88-85-7	0.89	U	0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U	0.89	1.9	1
10401	MCPA	94-74-6	340	U	340	340	1
10401	MCPP (Mecoprop)	93-65-2	83	U	83	280	1
10401	2,4,5-T	93-76-5	0.33		0.091	0.19	1
10401	2,4,5-TP	93-72-1	0.083	U	0.083	0.19	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does						

Sample Description: SED-029-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163610
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD029 SDG#: DE036-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for MCPA and 2,4-D represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.37	U	0.37	0.92	5
01363	Alpha BHC	319-84-6	0.29	J	0.19	0.92	5
01363	Beta BHC	319-85-7	0.33	U	0.33	0.92	5
01363	Gamma BHC - Lindane	58-89-9	0.19	U	0.19	0.92	5
01363	Chlordane	57-74-9	4.4	U	4.4	19	5
01363	p,p-DDD	72-54-8	0.74	U	0.74	1.9	5
01363	p,p-DDE	72-55-9	0.43	U	0.43	1.9	5
01363	p,p-DDT	50-29-3	8.5	U	8.5	8.5	5
01363	Delta BHC	319-86-8	0.20	U	0.20	0.92	5
01363	Dieldrin	60-57-1	1.3	U	1.3	1.9	5
01363	Endosulfan I	959-98-8	0.24	U	0.24	0.92	5
01363	Endosulfan II	33213-65-9	0.48	U	0.48	1.9	5
01363	Endosulfan Sulfate	1031-07-8	0.37	U	0.37	1.9	5
01363	Endrin	72-20-8	0.37	U	0.37	1.9	5
01363	Endrin Aldehyde	7421-93-4	0.92	U	0.92	1.9	5
01363	Endrin Ketone	53494-70-5	0.37	U	0.37	1.9	5
01363	Heptachlor	76-44-8	0.33	U	0.33	0.92	5
01363	Heptachlor Epoxide	1024-57-3	1.2	U	1.2	1.2	5
01363	Methoxychlor	72-43-5	1.9	U	1.9	9.2	5
01363	Mirex	2385-85-5	0.37	U	0.37	1.9	5
01363	Toxaphene	8001-35-2	12	U	12	37	5
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	11	U	11	37	10
10225	Aroclor 5442	12642-23-8	11	U	11	37	10
10225	Aroclor 5460	11126-42-4	170		11	37	10
10225	PCB-1016	12674-11-2	3.7	U	3.7	19	10
10225	PCB-1221	11104-28-2	5.5	U	5.5	19	10
10225	PCB-1232	11141-16-5	5.8	U	5.8	19	10
10225	PCB-1242	53469-21-9	5.5	U	5.5	19	10
10225	PCB-1248	12672-29-6	3.7	U	3.7	19	10
10225	PCB-1254	11097-69-1	180		3.7	19	10
10225	PCB-1260	11096-82-5	3.7	U	3.7	19	10
10225	PCB-1262	37324-23-5	3.7	U	3.7	19	10
10225	PCB-1268	11100-14-4	3.7	U	3.7	19	10
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						

Sample Description: SED-029-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163610
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD029 SDG#: DE036-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,400		5.36	21.3	1
07914	Boron	7440-42-8	4.76	J	0.948	5.32	1
01650	Calcium	7440-70-2	23,900		6.53	21.3	1
01654	Iron	7439-89-6	16,900		5.02	21.3	1
01656	Lithium	7439-93-2	18.5		0.23	2.1	1
01657	Magnesium	7439-95-4	4,470		2.70	10.6	1
06958	Manganese	7439-96-5	255		0.0831	0.532	1
10145	Phosphorus	7723-14-0	403		0.596	10.6	1
01662	Potassium	7440-09-7	2,610		19.2	53.2	1
01667	Sodium	7440-23-5	86.8	J	39.7	106	1
07968	Strontium	7440-24-6	45.6		0.0660	0.532	1
06969	Tin	7440-31-5	2.05	J	1.06	10.6	1
06970	Titanium	7440-32-6	1,020		0.409	1.08	1
10146	Zirconium	7440-67-7	0.894	U	0.894	5.32	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.191	J	0.0651	0.217	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.15		0.0651	0.434	2
06126	Barium	7440-39-3	100		0.117	0.434	2
06127	Beryllium	7440-41-7	0.463		0.0174	0.109	2
06128	Cadmium	7440-43-9	0.902		0.0391	0.109	2
06131	Chromium	7440-47-3	23.0		0.130	0.434	2
06132	Cobalt	7440-48-4	6.94		0.0217	0.109	2
06133	Copper	7440-50-8	17.8		0.0717	0.434	2
06135	Lead	7439-92-1	50.6		0.0113	0.217	2
06138	Molybdenum	7439-98-7	0.694		0.0543	0.109	2
06139	Nickel	7440-02-0	15.1		0.109	0.434	2
06141	Selenium	7782-49-2	0.144	J	0.0434	0.434	2
06142	Silver	7440-22-4	0.147		0.0130	0.109	2
06145	Thallium	7440-28-0	0.188		0.0326	0.109	2
06148	Vanadium	7440-62-2	41.3		0.0239	0.109	2
06149	Zinc	7440-66-6	174		0.608	3.26	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0380	J	0.0031	0.110	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.89	U	0.89	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10	U	10	33.2	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1	1

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

Sample Description: SED-029-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163610
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD029 SDG#: DE036-12

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	461	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.35	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	9.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 02:14	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 19:02	Joseph M Gambler	10
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 10:47	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 05:08	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 21:13	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1

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

Sample Description: SED-029-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163610
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD029 SDG#: DE036-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:38	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:15	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:16	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:05	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:05	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:05	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/28/2010 16:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:05	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:37	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 18:24	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 00:06	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 22:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-031-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163611
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD031 SDG#: DE036-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	560	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzoic acid	65-85-0	190	U	190	560	1
04688	Benzyl alcohol	100-51-6	190	U	190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190	1
04688	4-Chloroaniline	106-47-8	74	U	74	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560	1
04688	2,4-Dinitrophenol	51-28-5	740	U	740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	38	J	19	370	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	74	U	74	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	37	U	37	190	1
04688	4-Methylphenol	106-44-5	37	U	37	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	37	U	37	190	1
04688	4-Nitroaniline	100-01-6	74	U	74	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	560	1

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163611
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD031 SDG#: DE036-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
3,3'-dichlorobenzidine

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.74	U	0.74	1.9	1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.9	1
10138	Anthracene	120-12-7	0.43	J	0.37	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.99	J	0.74	1.9	1
10138	Benzo(a)pyrene	50-32-8	1.1	J	0.74	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	2.7		0.74	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.74	U	0.74	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.85	J	0.74	1.9	1
10138	Butylbenzylphthalate	85-68-7	7.2	J	6.7	20	1
10138	Di-n-butylphthalate	84-74-2	13	J	6.7	20	1
10138	Chrysene	218-01-9	2.2		0.37	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.74	U	0.74	1.9	1
10138	Diethylphthalate	84-66-2	6.7	U	6.7	20	1
10138	Dimethylphthalate	131-11-3	6.7	U	6.7	20	1
10138	Fluoranthene	206-44-0	3.0		0.74	1.9	1
10138	Fluorene	86-73-7	2.0		0.74	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.74	U	0.74	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.74	U	0.74	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.74	U	0.74	1.9	1
10138	Naphthalene	91-20-3	1.1	J	0.74	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.74	U	0.74	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.7	U	6.7	20	1
10138	Phenanthrene	85-01-8	1.6	J	0.74	1.9	1
10138	Pyrene	129-00-0	2.3		0.74	1.9	1

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0	1
10401	Dalapon	75-99-0	4.9	U	4.9	10	1
10401	2,4-DB	94-82-6	16	U	16	16	1
10401	Dicamba	1918-00-9	0.69	J	0.44	1.3	1
10401	Dinoseb	88-85-7	0.89	U	0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U	0.89	1.9	1
10401	MCPA	94-74-6	84	U	84	280	1
10401	MCPP (Mecoprop)	93-65-2	83	U	83	280	1
10401	2,4,5-T	93-76-5	0.091	U	0.091	0.19	1
10401	2,4,5-TP	93-72-1	0.083	U	0.083	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

Sample Description: SED-031-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163611
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD031 SDG#: DE036-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported.						
	Due to interfering peaks on the chromatogram, the values reported for 2,4-DB represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.073	U	0.073	0.18	1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.18	1
01363	Beta BHC	319-85-7	0.13	U	0.13	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.051	U	0.051	0.18	1
01363	Chlordane	57-74-9	2.4	U	2.4	3.8	1
01363	p,p-DDD	72-54-8	0.073	U	0.073	0.38	1
01363	p,p-DDE	72-55-9	1.1	U	1.1	1.1	1
01363	p,p-DDT	50-29-3	2.3	U	2.3	2.3	1
01363	Delta BHC	319-86-8	0.10	U	0.10	0.18	1
01363	Dieldrin	60-57-1	0.28	U	0.28	0.38	1
01363	Endosulfan I	959-98-8	0.049	U	0.049	0.18	1
01363	Endosulfan II	33213-65-9	0.19	U	0.19	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.073	U	0.073	0.38	1
01363	Endrin	72-20-8	0.073	U	0.073	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.073	U	0.073	0.38	1
01363	Endrin Ketone	53494-70-5	0.17	U	0.17	0.38	1
01363	Heptachlor	76-44-8	0.067	U	0.067	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.11	U	0.11	0.18	1
01363	Methoxychlor	72-43-5	0.93	U	0.93	1.8	1
01363	Mirex	2385-85-5	0.24	U	0.24	0.38	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.3	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	5.6	U	5.6	18	5
10225	Aroclor 5442	12642-23-8	5.6	U	5.6	18	5
10225	Aroclor 5460	11126-42-4	9.3	J	5.6	18	5
10225	PCB-1016	12674-11-2	1.8	U	1.8	9.4	5
10225	PCB-1221	11104-28-2	2.8	U	2.8	9.4	5
10225	PCB-1232	11141-16-5	2.9	U	2.9	9.4	5
10225	PCB-1242	53469-21-9	2.8	U	2.8	9.4	5
10225	PCB-1248	12672-29-6	1.8	U	1.8	9.4	5
10225	PCB-1254	11097-69-1	8.4	J	1.8	9.4	5
10225	PCB-1260	11096-82-5	5.3	J	1.8	9.4	5
10225	PCB-1262	37324-23-5	1.8	U	1.8	9.4	5
10225	PCB-1268	11100-14-4	1.8	U	1.8	9.4	5
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,300		5.37	21.4	1
07914	Boron	7440-42-8	6.11		0.951	5.34	1

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163611
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD031 SDG#: DE036-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	3,000		6.55	21.4	1
01654	Iron	7439-89-6	17,000		5.03	21.4	1
01656	Lithium	7439-93-2	19.5		0.24	2.1	1
01657	Magnesium	7439-95-4	3,910		2.71	10.7	1
06958	Manganese	7439-96-5	234		0.0833	0.534	1
10145	Phosphorus	7723-14-0	374		0.598	10.7	1
01662	Potassium	7440-09-7	2,850		19.2	53.4	1
01667	Sodium	7440-23-5	54.3	J	39.9	107	1
07968	Strontium	7440-24-6	16.1		0.0662	0.534	1
06969	Tin	7440-31-5	2.03	J	1.07	10.7	1
06970	Titanium	7440-32-6	1,200		0.406	1.07	1
10146	Zirconium	7440-67-7	0.920	J	0.897	5.34	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0660	U	0.0660	0.220	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.90		0.0660	0.440	2
06126	Barium	7440-39-3	112		0.119	0.440	2
06127	Beryllium	7440-41-7	0.546		0.0176	0.110	2
06128	Cadmium	7440-43-9	0.255		0.0396	0.110	2
06131	Chromium	7440-47-3	25.1		0.132	0.440	2
06132	Cobalt	7440-48-4	7.18		0.0220	0.110	2
06133	Copper	7440-50-8	12.7		0.0726	0.440	2
06135	Lead	7439-92-1	20.2		0.0114	0.220	2
06138	Molybdenum	7439-98-7	0.584		0.0550	0.110	2
06139	Nickel	7440-02-0	15.1		0.110	0.440	2
06141	Selenium	7782-49-2	0.151	J	0.0440	0.440	2
06142	Silver	7440-22-4	0.0557	J	0.0132	0.110	2
06145	Thallium	7440-28-0	0.302		0.0330	0.110	2
06148	Vanadium	7440-62-2	44.2		0.0242	0.110	2
06149	Zinc	7440-66-6	89.1		0.616	3.30	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0049	J	0.0030	0.105	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4		0.89	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10	U	10	33.3	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163611
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD031 SDG#: DE036-13

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	480	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	6.92	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	10	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 02:48	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 19:35	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 11:15	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 05:23	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 21:32	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163611
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD031 SDG#: DE036-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:49	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:19	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:27	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:08	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:08	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:08	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:08	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:39	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 19:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 00:30	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 22:26	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-030-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163612
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD030 SDG#: DE036-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U	200	600	1
04688	Benzidine	92-87-5	1,400	U	1,400	4,000	1
04688	Benzoic acid	65-85-0	200	U	200	600	1
04688	Benzyl alcohol	100-51-6	200	U	200	600	1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200	1
04688	Carbazole	86-74-8	20	U	20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	40	U	40	200	1
04688	4-Chloroaniline	106-47-8	80	U	80	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200	1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200	1
04688	2-Chlorophenol	95-57-8	20	U	20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U	40	200	1
04688	Dibenzofuran	132-64-9	20	U	20	200	1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200	1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200	1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	400	1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200	1
04688	2,4-Dimethylphenol	105-67-9	40	U	40	200	1
04688	3,5-Dimethylphenol	108-68-9	40	U	40	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	600	1
04688	2,4-Dinitrophenol	51-28-5	800	U	800	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	40	U	40	200	1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	56	J	20	400	1
04688	Hexachlorobenzene	118-74-1	20	U	20	200	1
04688	Hexachlorobutadiene	87-68-3	80	U	80	200	1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	600	1
04688	Hexachloroethane	67-72-1	20	U	20	200	1
04688	Isophorone	78-59-1	20	U	20	200	1
04688	2-Methylphenol	95-48-7	40	U	40	200	1
04688	4-Methylphenol	106-44-5	40	U	40	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U	20	200	1
04688	3-Nitroaniline	99-09-2	40	U	40	200	1
04688	4-Nitroaniline	100-01-6	80	U	80	200	1
04688	Nitrobenzene	98-95-3	20	U	20	200	1
04688	2-Nitrophenol	88-75-5	20	U	20	200	1
04688	4-Nitrophenol	100-02-7	200	U	200	600	1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U	200	600	1

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163612
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD030 SDG#: DE036-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	20	U	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	40	U	40	200	1
04688	2,4,6-Trichlorophenol	88-06-2	40	U	40	200	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
3,3'-dichlorobenzidine

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.80	U	0.80	2.0	1
10138	Acenaphthylene	208-96-8	0.40	U	0.40	2.0	1
10138	Anthracene	120-12-7	0.40	U	0.40	2.0	1
10138	Benzo(a)anthracene	56-55-3	0.80	U	0.80	2.0	1
10138	Benzo(a)pyrene	50-32-8	0.80	U	0.80	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	2.0		0.80	2.0	1
10138	Benzo(g,h,i)perylene	191-24-2	0.80	U	0.80	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	0.80	U	0.80	2.0	1
10138	Butylbenzylphthalate	85-68-7	7.2	U	7.2	22	1
10138	Di-n-butylphthalate	84-74-2	7.3	J	7.2	22	1
10138	Chrysene	218-01-9	1.6	J	0.40	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	U	0.80	2.0	1
10138	Diethylphthalate	84-66-2	7.2	U	7.2	22	1
10138	Dimethylphthalate	131-11-3	7.2	U	7.2	22	1
10138	Fluoranthene	206-44-0	1.4	J	0.80	2.0	1
10138	Fluorene	86-73-7	0.80	U	0.80	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	U	0.80	2.0	1
10138	1-Methylnaphthalene	90-12-0	0.80	U	0.80	2.0	1
10138	2-Methylnaphthalene	91-57-6	0.80	U	0.80	2.0	1
10138	Naphthalene	91-20-3	0.83	J	0.80	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	0.80	U	0.80	2.0	1
10138	Di-n-octylphthalate	117-84-0	7.2	U	7.2	22	1
10138	Phenanthrene	85-01-8	0.89	J	0.80	2.0	1
10138	Pyrene	129-00-0	1.2	J	0.80	2.0	1

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	3.0	J	1.4	4.3	1
10401	Dalapon	75-99-0	5.3	U	5.3	11	1
10401	2,4-DB	94-82-6	12	U	12	12	1
10401	Dicamba	1918-00-9	0.78	J	0.48	1.4	1
10401	Dinoseb	88-85-7	0.96	U	0.96	2.9	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.96	U	0.96	2.0	1
10401	MCPA	94-74-6	500	U	500	500	1
10401	MCPP (Mecoprop)	93-65-2	90	U	90	300	1
10401	2,4,5-T	93-76-5	0.098	U	0.098	0.20	1
10401	2,4,5-TP	93-72-1	0.090	U	0.090	0.20	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

Sample Description: SED-030-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163612
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD030 SDG#: DE036-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported.						
	Due to interfering peaks on the chromatogram, the values reported for MCPA and 2,4-DB represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.079	U	0.079	0.20	1
01363	Alpha BHC	319-84-6	0.050	U	0.050	0.20	1
01363	Beta BHC	319-85-7	0.54		0.072	0.20	1
01363	Gamma BHC - Lindane	58-89-9	0.062	U	0.062	0.20	1
01363	Chlordane	57-74-9	4.7	U	4.7	4.7	1
01363	p,p-DDD	72-54-8	1.9	U	1.9	1.9	1
01363	p,p-DDE	72-55-9	1.1	U	1.1	1.1	1
01363	p,p-DDT	50-29-3	2.6	U	2.6	2.6	1
01363	Delta BHC	319-86-8	0.043	U	0.043	0.20	1
01363	Dieldrin	60-57-1	0.44	U	0.44	0.44	1
01363	Endosulfan I	959-98-8	0.053	U	0.053	0.20	1
01363	Endosulfan II	33213-65-9	0.37	U	0.37	0.41	1
01363	Endosulfan Sulfate	1031-07-8	0.079	U	0.079	0.41	1
01363	Endrin	72-20-8	0.079	U	0.079	0.41	1
01363	Endrin Aldehyde	7421-93-4	0.61	U	0.61	0.61	1
01363	Endrin Ketone	53494-70-5	0.35	U	0.35	0.41	1
01363	Heptachlor	76-44-8	0.072	U	0.072	0.20	1
01363	Heptachlor Epoxide	1024-57-3	0.28	U	0.28	0.28	1
01363	Methoxychlor	72-43-5	0.41	U	0.41	2.0	1
01363	Mirex	2385-85-5	0.15	U	0.15	0.41	1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.9	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.4	U	2.4	7.9	2
10225	Aroclor 5442	12642-23-8	2.4	U	2.4	7.9	2
10225	Aroclor 5460	11126-42-4	6.7	J	2.4	7.9	2
10225	PCB-1016	12674-11-2	0.79	U	0.79	4.1	2
10225	PCB-1221	11104-28-2	1.2	U	1.2	4.1	2
10225	PCB-1232	11141-16-5	1.2	U	1.2	4.1	2
10225	PCB-1242	53469-21-9	1.2	U	1.2	4.1	2
10225	PCB-1248	12672-29-6	0.79	U	0.79	4.1	2
10225	PCB-1254	11097-69-1	6.3		0.79	4.1	2
10225	PCB-1260	11096-82-5	5.6		0.79	4.1	2
10225	PCB-1262	37324-23-5	0.79	U	0.79	4.1	2
10225	PCB-1268	11100-14-4	0.79	U	0.79	4.1	2
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,700		5.78	23.0	1
07914	Boron	7440-42-8	7.59		1.02	5.74	1

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163612
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD030 SDG#: DE036-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	4,700		7.04	23.0	1
01654	Iron	7439-89-6	26,600		5.41	23.0	1
01656	Lithium	7439-93-2	28.8		0.25	2.3	1
01657	Magnesium	7439-95-4	5,770		2.92	11.5	1
06958	Manganese	7439-96-5	399		0.0896	0.574	1
10145	Phosphorus	7723-14-0	700		0.643	11.5	1
01662	Potassium	7440-09-7	5,000		20.7	57.4	1
01667	Sodium	7440-23-5	78.9	J	42.8	115	1
07968	Strontium	7440-24-6	29.1		0.0712	0.574	1
06969	Tin	7440-31-5	2.34	J	1.15	11.5	1
06970	Titanium	7440-32-6	1,460		0.437	1.15	1
10146	Zirconium	7440-67-7	1.44	J	0.965	5.74	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.115	J	0.0717	0.239	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.83		0.0717	0.478	2
06126	Barium	7440-39-3	202		0.129	0.478	2
06127	Beryllium	7440-41-7	0.785		0.0191	0.119	2
06128	Cadmium	7440-43-9	0.461		0.0430	0.119	2
06131	Chromium	7440-47-3	33.4		0.143	0.478	2
06132	Cobalt	7440-48-4	9.86		0.0239	0.119	2
06133	Copper	7440-50-8	18.1		0.0789	0.478	2
06135	Lead	7439-92-1	19.8		0.0124	0.239	2
06138	Molybdenum	7439-98-7	0.876		0.0597	0.119	2
06139	Nickel	7440-02-0	22.2		0.119	0.478	2
06141	Selenium	7782-49-2	0.209	J	0.0478	0.478	2
06142	Silver	7440-22-4	0.0806	J	0.0143	0.119	2
06145	Thallium	7440-28-0	0.394		0.0358	0.119	2
06148	Vanadium	7440-62-2	56.4		0.0263	0.119	2
06149	Zinc	7440-66-6	122		0.669	3.58	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0222	J	0.0032	0.113	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.96	U	0.96	1.2	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8	U	10.8	35.8	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.70	J	0.24	1.2	1
	ASTM D1498		**mV**		**mV**	**mV**	

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163612
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD030 SDG#: DE036-14

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	489	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.22	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	16.3	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 03:23	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 20:09	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 11:42	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 05:37	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 21:51	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163612
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD030 SDG#: DE036-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:53	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:29	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:31	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:17	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:17	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:17	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:17	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:40	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 20:24	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 00:54	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 22:58	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-040-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163613
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD040 SDG#: DE036-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	550	1
04688	Benzyl alcohol	100-51-6	180	U	180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	73	U	73	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	360	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	73	U	73	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	550	1

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

Sample Description: SED-040-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163613
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD040 SDG#: DE036-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
3,3'-dichlorobenzidine

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8	1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8	1
10138	Anthracene	120-12-7	0.38	J	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.84	J	0.73	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.79	J	0.73	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	2.1		0.73	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U	0.73	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.73	J	0.73	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20	1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	20	1
10138	Chrysene	218-01-9	1.8	J	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8	1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20	1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20	1
10138	Fluoranthene	206-44-0	3.2		0.73	1.8	1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U	0.73	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8	1
10138	Naphthalene	91-20-3	1.3	J	0.73	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20	1
10138	Phenanthrene	85-01-8	2.4		0.73	1.8	1
10138	Pyrene	129-00-0	2.3		0.73	1.8	1

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U	4.8	9.8	1
10401	2,4-DB	94-82-6	0.68	U	0.68	1.9	1
10401	Dicamba	1918-00-9	0.44	U	0.44	1.3	1
10401	Dinoseb	88-85-7	0.87	U	0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87	U	0.87	1.9	1
10401	MCPA	94-74-6	580	U	580	580	1
10401	MCPP (Mecoprop)	93-65-2	410		82	270	1
10401	2,4,5-T	93-76-5	0.089	U	0.089	0.19	1
10401	2,4,5-TP	93-72-1	0.082	U	0.082	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

Sample Description: SED-040-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163613
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD040 SDG#: DE036-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPA						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.072	U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.075	U	0.075	0.18	1
01363	Beta BHC	319-85-7	0.065	U	0.065	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.30	U	0.30	0.30	1
01363	Chlordane	57-74-9	4.1	U	4.1	4.1	1
01363	p,p-DDD	72-54-8	0.072	U	0.072	0.37	1
01363	p,p-DDE	72-55-9	0.56	U	0.56	0.56	1
01363	p,p-DDT	50-29-3	0.69	U	0.69	0.69	1
01363	Delta BHC	319-86-8	0.039	U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.18	U	0.18	0.37	1
01363	Endosulfan I	959-98-8	0.048	U	0.048	0.18	1
01363	Endosulfan II	33213-65-9	0.13	U	0.13	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.072	U	0.072	0.37	1
01363	Endrin	72-20-8	0.072	U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.25	U	0.25	0.37	1
01363	Endrin Ketone	53494-70-5	0.13	U	0.13	0.37	1
01363	Heptachlor	76-44-8	0.17	U	0.17	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.050	U	0.050	0.18	1
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8	1
01363	Mirex	2385-85-5	0.072	U	0.072	0.37	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.2	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	4.2		1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9	1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9	1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.9	1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9	1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9	1
10225	PCB-1254	11097-69-1	2.4		0.36	1.9	1
10225	PCB-1260	11096-82-5	4.3		0.36	1.9	1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9	1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						

Sample Description: SED-040-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163613
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD040 SDG#: DE036-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,700		5.38	21.4	1
07914	Boron	7440-42-8	5.27	J	0.952	5.35	1
01650	Calcium	7440-70-2	2,320		6.55	21.4	1
01654	Iron	7439-89-6	18,700		5.04	21.4	1
01656	Lithium	7439-93-2	21.6		0.24	2.1	1
01657	Magnesium	7439-95-4	4,180		2.72	10.7	1
06958	Manganese	7439-96-5	252		0.0834	0.535	1
10145	Phosphorus	7723-14-0	408		0.599	10.7	1
01662	Potassium	7440-09-7	3,390		19.2	53.5	1
01667	Sodium	7440-23-5	62.3	J	39.9	107	1
07968	Strontium	7440-24-6	13.8		0.0663	0.535	1
06969	Tin	7440-31-5	1.82	J	1.07	10.7	1
06970	Titanium	7440-32-6	1,120		0.410	1.08	1
10146	Zirconium	7440-67-7	1.05	J	0.898	5.35	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0654	U	0.0654	0.218	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.31		0.0654	0.436	2
06126	Barium	7440-39-3	120		0.118	0.436	2
06127	Beryllium	7440-41-7	0.503		0.0174	0.109	2
06128	Cadmium	7440-43-9	0.192		0.0393	0.109	2
06131	Chromium	7440-47-3	20.5		0.131	0.436	2
06132	Cobalt	7440-48-4	6.78		0.0218	0.109	2
06133	Copper	7440-50-8	9.21		0.0720	0.436	2
06135	Lead	7439-92-1	10.8		0.0113	0.218	2
06138	Molybdenum	7439-98-7	0.471		0.0545	0.109	2
06139	Nickel	7440-02-0	13.0		0.109	0.436	2
06141	Selenium	7782-49-2	0.129	J	0.0436	0.436	2
06142	Silver	7440-22-4	0.0217	J	0.0131	0.109	2
06145	Thallium	7440-28-0	0.310		0.0327	0.109	2
06148	Vanadium	7440-62-2	41.7		0.0240	0.109	2
06149	Zinc	7440-66-6	77.6		0.611	3.27	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0039	J	0.0031	0.107	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.87	U	0.87	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.7	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.44	J	0.22	1.1	1

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

Sample Description: SED-040-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163613
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD040 SDG#: DE036-15

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	494	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.01	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	8.3	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 03:57	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/23/2010 20:42	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 12:10	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 05:52	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 23:23	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1

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

Sample Description: SED-040-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163613
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SD040 SDG#: DE036-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 09:57	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:33	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:34	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:20	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/28/2010 16:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:20	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:20	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:20	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:44	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 21:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 01:19	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 23:22	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163614
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL086 SDG#: DE036-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

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

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163614
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL086 SDG#: DE036-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 3,3'-dichlorobenzidine						
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.71	U	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.71	U	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.71	U	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.71	U	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.71	U	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19	1
10138	Chrysene	218-01-9	0.45	J	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluoranthene	206-44-0	0.71	U	0.71	1.8	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.89	J	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
10138	Phenanthrene	85-01-8	0.71	U	0.71	1.8	1
10138	Pyrene	129-00-0	0.71	U	0.71	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	0.66	U	0.66	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	81	U	81	270	1
10401	MCPP (Mecoprop)	93-65-2	140	U	140	270	1
10401	2,4,5-T	93-76-5	1.8		0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.14	U	0.14	0.18	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory						

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

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163614
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL086 SDG#: DE036-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for MCPP and 2,4,5-TP represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070	U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.070	U	0.070	0.36	1
01363	p,p-DDT	50-29-3	0.070	U	0.070	0.36	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070	U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.17	U	0.17	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.7	J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	5.2		0.35	1.8	1
10225	PCB-1254	11097-69-1	3.6		0.35	1.8	1
10225	PCB-1260	11096-82-5	1.7	J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,900		5.18	20.6	1
07914	Boron	7440-42-8	6.40		0.917	5.15	1

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

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163614
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL086 SDG#: DE036-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	3,430		6.32	20.6	1
01654	Iron	7439-89-6	18,500		4.85	20.6	1
01656	Lithium	7439-93-2	19.5		0.23	2.1	1
01657	Magnesium	7439-95-4	3,520		2.62	10.3	1
06958	Manganese	7439-96-5	255		0.0804	0.515	1
10145	Phosphorus	7723-14-0	358		0.577	10.3	1
01662	Potassium	7440-09-7	3,280		18.6	51.5	1
01667	Sodium	7440-23-5	71.0	J	38.4	103	1
07968	Strontium	7440-24-6	20.6		0.0639	0.515	1
06969	Tin	7440-31-5	1.98	J	1.03	10.3	1
06970	Titanium	7440-32-6	1,110		0.403	1.06	1
10146	Zirconium	7440-67-7	1.95	J	0.866	5.15	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0631	U	0.0631	0.210	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.85		0.0631	0.420	2
06126	Barium	7440-39-3	122		0.114	0.420	2
06127	Beryllium	7440-41-7	0.729		0.0168	0.105	2
06128	Cadmium	7440-43-9	0.287		0.0378	0.105	2
06131	Chromium	7440-47-3	22.9		0.126	0.420	2
06132	Cobalt	7440-48-4	7.16		0.0210	0.105	2
06133	Copper	7440-50-8	10.5		0.0694	0.420	2
06135	Lead	7439-92-1	9.17		0.0109	0.210	2
06138	Molybdenum	7439-98-7	0.902		0.0526	0.105	2
06139	Nickel	7440-02-0	13.9		0.105	0.420	2
06141	Selenium	7782-49-2	0.140	J	0.0420	0.420	2
06142	Silver	7440-22-4	0.0435	J	0.0126	0.105	2
06145	Thallium	7440-28-0	0.375		0.0315	0.105	2
06148	Vanadium	7440-62-2	40.9		0.0231	0.105	2
06149	Zinc	7440-66-6	81.6		0.589	3.15	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0098	J	0.0029	0.101	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.2		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.8	J	9.6	31.8	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.47	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163614
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL086 SDG#: DE036-16

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	468	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.51	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 04:31	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/24/2010 03:03	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 12:38	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 07:34	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/22/2010 23:42	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163614
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL086 SDG#: DE036-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 10:00	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:37	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:38	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:23	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:23	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:23	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:23	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:45	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 21:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 01:43	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 23:38	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163615
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL092 SDG#: DE036-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	560	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U	190	560	1
04688	Benzyl alcohol	100-51-6	190	U	190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190	1
04688	4-Chloroaniline	106-47-8	75	U	75	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560	1
04688	2,4-Dinitrophenol	51-28-5	750	U	750	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	380	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	38	U	38	190	1
04688	4-Methylphenol	106-44-5	38	U	38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	38	U	38	190	1
04688	4-Nitroaniline	100-01-6	75	U	75	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	560	1

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

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163615
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL092 SDG#: DE036-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
3,3'-dichlorobenzidine

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.75	U	0.75	1.9	1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9	1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.75	U	0.75	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.75	U	0.75	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.75	U	0.75	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U	0.75	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U	0.75	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.8	U	6.8	20	1
10138	Di-n-butylphthalate	84-74-2	6.8	U	6.8	20	1
10138	Chrysene	218-01-9	0.38	U	0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U	0.75	1.9	1
10138	Diethylphthalate	84-66-2	6.8	U	6.8	20	1
10138	Dimethylphthalate	131-11-3	6.8	U	6.8	20	1
10138	Fluoranthene	206-44-0	0.75	U	0.75	1.9	1
10138	Fluorene	86-73-7	0.75	U	0.75	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	U	0.75	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.75	U	0.75	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.75	U	0.75	1.9	1
10138	Naphthalene	91-20-3	0.78	J	0.75	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U	0.75	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.8	U	6.8	20	1
10138	Phenanthrene	85-01-8	0.75	U	0.75	1.9	1
10138	Pyrene	129-00-0	0.75	U	0.75	1.9	1

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1	1
10401	Dalapon	75-99-0	5.0	U	5.0	10	1
10401	2,4-DB	94-82-6	3.1		0.70	1.9	1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.4	1
10401	Dinoseb	88-85-7	0.90	U	0.90	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U	0.90	1.9	1
10401	MCPA	94-74-6	450		86	280	1
10401	MCPP (Mecoprop)	93-65-2	84	U	84	280	1
10401	2,4,5-T	93-76-5	0.092	U	0.092	0.19	1
10401	2,4,5-TP	93-72-1	0.084	U	0.084	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163615
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL092 SDG#: DE036-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.074	U	0.074	0.19	1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.19	1
01363	Beta BHC	319-85-7	0.068	U	0.068	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.038	U	0.038	0.19	1
01363	Chlordane	57-74-9	0.90	U	0.90	3.8	1
01363	p,p-DDD	72-54-8	0.074	U	0.074	0.38	1
01363	p,p-DDE	72-55-9	0.074	U	0.074	0.38	1
01363	p,p-DDT	50-29-3	0.074	U	0.074	0.38	1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19	1
01363	Dieldrin	60-57-1	0.074	U	0.074	0.38	1
01363	Endosulfan I	959-98-8	0.050	U	0.050	0.19	1
01363	Endosulfan II	33213-65-9	0.074	U	0.074	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.074	U	0.074	0.38	1
01363	Endrin	72-20-8	0.074	U	0.074	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.074	U	0.074	0.38	1
01363	Endrin Ketone	53494-70-5	0.074	U	0.074	0.38	1
01363	Heptachlor	76-44-8	0.068	U	0.068	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.038	U	0.038	0.19	1
01363	Methoxychlor	72-43-5	0.38	U	0.38	1.9	1
01363	Mirex	2385-85-5	0.074	U	0.074	0.38	1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.4	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9	1
10225	PCB-1232	11141-16-5	0.59	U	0.59	1.9	1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9	1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9	1
10225	PCB-1254	11097-69-1	0.37	U	0.37	1.9	1
10225	PCB-1260	11096-82-5	0.37	U	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,400		5.61	22.3	1
07914	Boron	7440-42-8	9.54		0.992	5.57	1
01650	Calcium	7440-70-2	19,800		6.83	22.3	1
01654	Iron	7439-89-6	33,300		10.5	44.6	2
01656	Lithium	7439-93-2	37.3		0.25	2.2	1
01657	Magnesium	7439-95-4	8,570		2.83	11.1	1
06958	Manganese	7439-96-5	360		0.0870	0.557	1

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

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163615
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL092 SDG#: DE036-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
10145	Phosphorus	7723-14-0	569		0.624	11.1	1
01662	Potassium	7440-09-7	6,160		20.1	55.7	1
01667	Sodium	7440-23-5	113		41.6	111	1
07968	Strontium	7440-24-6	51.1		0.0691	0.557	1
06969	Tin	7440-31-5	2.05	J	1.11	11.1	1
06970	Titanium	7440-32-6	1,610		0.424	1.11	1
10146	Zirconium	7440-67-7	3.79	J	0.937	5.57	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0680	J	0.0669	0.223	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.56		0.0669	0.446	2
06126	Barium	7440-39-3	147		0.120	0.446	2
06127	Beryllium	7440-41-7	0.867		0.0178	0.111	2
06128	Cadmium	7440-43-9	0.285		0.0401	0.111	2
06131	Chromium	7440-47-3	43.1		0.134	0.446	2
06132	Cobalt	7440-48-4	12.3		0.0223	0.111	2
06133	Copper	7440-50-8	19.4		0.0736	0.446	2
06135	Lead	7439-92-1	12.7		0.0116	0.223	2
06138	Molybdenum	7439-98-7	0.606		0.0557	0.111	2
06139	Nickel	7440-02-0	23.3		0.111	0.446	2
06141	Selenium	7782-49-2	0.320	J	0.0446	0.446	2
06142	Silver	7440-22-4	0.0392	J	0.0134	0.111	2
06145	Thallium	7440-28-0	0.468		0.0334	0.111	2
06148	Vanadium	7440-62-2	84.7		0.0245	0.111	2
06149	Zinc	7440-66-6	111		0.624	3.34	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032	U	0.0032	0.113	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.6		0.90	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1	U	10.1	33.8	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.39	J	0.23	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	459		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						

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

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163615
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL092 SDG#: DE036-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.12	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 05:05	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/24/2010 03:40	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 13:05	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 07:48	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/23/2010 00:01	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/28/2010 16:15	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 10:04	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163615
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL092 SDG#: DE036-17

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:40	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:42	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:26	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:26	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:26	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:26	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:46	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 21:35	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 02:07	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/05/2011 23:54	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163616
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL103 SDG#: DE036-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	560	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U	190	560	1
04688	Benzyl alcohol	100-51-6	190	U	190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190	1
04688	4-Chloroaniline	106-47-8	75	U	75	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560	1
04688	2,4-Dinitrophenol	51-28-5	750	U	750	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	380	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	38	U	38	190	1
04688	4-Methylphenol	106-44-5	38	U	38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	38	U	38	190	1
04688	4-Nitroaniline	100-01-6	75	U	75	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	560	1

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

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163616
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL103 SDG#: DE036-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
3,3'-dichlorobenzidine

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.75	U	0.75	1.9	1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9	1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.75	U	0.75	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.88	J	0.75	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	2.0		0.75	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U	0.75	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U	0.75	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.8	U	6.8	20	1
10138	Di-n-butylphthalate	84-74-2	6.8	U	6.8	20	1
10138	Chrysene	218-01-9	1.7	J	0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U	0.75	1.9	1
10138	Diethylphthalate	84-66-2	6.8	U	6.8	20	1
10138	Dimethylphthalate	131-11-3	6.8	U	6.8	20	1
10138	Fluoranthene	206-44-0	2.5		0.75	1.9	1
10138	Fluorene	86-73-7	0.75	U	0.75	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.96	J	0.75	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.75	U	0.75	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.75	U	0.75	1.9	1
10138	Naphthalene	91-20-3	0.91	J	0.75	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U	0.75	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.8	U	6.8	20	1
10138	Phenanthrene	85-01-8	1.3	J	0.75	1.9	1
10138	Pyrene	129-00-0	1.9		0.75	1.9	1

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1	1
10401	Dalapon	75-99-0	5.0	U	5.0	10	1
10401	2,4-DB	94-82-6	3.7		0.70	1.9	1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.4	1
10401	Dinoseb	88-85-7	0.90	U	0.90	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U	0.90	1.9	1
10401	MCPA	94-74-6	550		86	280	1
10401	MCPP (Mecoprop)	93-65-2	84	U	84	280	1
10401	2,4,5-T	93-76-5	0.092	U	0.092	0.19	1
10401	2,4,5-TP	93-72-1	0.084	U	0.084	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163616
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL103 SDG#: DE036-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.074	U	0.074	0.19	1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.19	1
01363	Beta BHC	319-85-7	0.068	U	0.068	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.038	U	0.038	0.19	1
01363	Chlordane	57-74-9	0.90	U	0.90	3.8	1
01363	p,p-DDD	72-54-8	0.074	U	0.074	0.38	1
01363	p,p-DDE	72-55-9	0.11	U	0.11	0.38	1
01363	p,p-DDT	50-29-3	0.074	U	0.074	0.38	1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19	1
01363	Dieldrin	60-57-1	0.074	U	0.074	0.38	1
01363	Endosulfan I	959-98-8	0.075	U	0.075	0.19	1
01363	Endosulfan II	33213-65-9	0.080	U	0.080	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.074	U	0.074	0.38	1
01363	Endrin	72-20-8	0.074	U	0.074	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.074	U	0.074	0.38	1
01363	Endrin Ketone	53494-70-5	0.074	U	0.074	0.38	1
01363	Heptachlor	76-44-8	0.068	U	0.068	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.70	U	0.70	0.70	1
01363	Methoxychlor	72-43-5	0.38	U	0.38	1.9	1
01363	Mirex	2385-85-5	0.074	U	0.074	0.38	1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.4	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	5.6	U	5.6	19	5
10225	Aroclor 5442	12642-23-8	5.6	U	5.6	19	5
10225	Aroclor 5460	11126-42-4	5.6	U	5.6	19	5
10225	PCB-1016	12674-11-2	1.9	U	1.9	9.6	5
10225	PCB-1221	11104-28-2	2.8	U	2.8	9.6	5
10225	PCB-1232	11141-16-5	2.9	U	2.9	9.6	5
10225	PCB-1242	53469-21-9	2.8	U	2.8	9.6	5
10225	PCB-1248	12672-29-6	1.9	U	1.9	9.6	5
10225	PCB-1254	11097-69-1	26		1.9	9.6	5
10225	PCB-1260	11096-82-5	1.9	U	1.9	9.6	5
10225	PCB-1262	37324-23-5	1.9	U	1.9	9.6	5
10225	PCB-1268	11100-14-4	1.9	U	1.9	9.6	5
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,400		5.50	21.9	1
07914	Boron	7440-42-8	7.62		0.973	5.47	1
01650	Calcium	7440-70-2	7,790		6.70	21.9	1
01654	Iron	7439-89-6	36,600		10.3	43.7	2

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

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163616
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL103 SDG#: DE036-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	40.6		0.24	2.2	1
01657	Magnesium	7439-95-4	8,970		2.78	10.9	1
06958	Manganese	7439-96-5	371		0.0853	0.547	1
10145	Phosphorus	7723-14-0	532		0.612	10.9	1
01662	Potassium	7440-09-7	5,820		19.7	54.7	1
01667	Sodium	7440-23-5	129		40.8	109	1
07968	Strontium	7440-24-6	33.6		0.0678	0.547	1
06969	Tin	7440-31-5	2.33	J	1.09	10.9	1
06970	Titanium	7440-32-6	1,690		0.428	1.13	1
10146	Zirconium	7440-67-7	5.02	J	0.918	5.47	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0708	J	0.0669	0.223	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.89		0.0669	0.446	2
06126	Barium	7440-39-3	163		0.120	0.446	2
06127	Beryllium	7440-41-7	0.976		0.0178	0.111	2
06128	Cadmium	7440-43-9	0.252		0.0401	0.111	2
06131	Chromium	7440-47-3	45.8		0.134	0.446	2
06132	Cobalt	7440-48-4	14.0		0.0223	0.111	2
06133	Copper	7440-50-8	19.4		0.0736	0.446	2
06135	Lead	7439-92-1	13.6		0.0116	0.223	2
06138	Molybdenum	7439-98-7	0.455		0.0557	0.111	2
06139	Nickel	7440-02-0	23.7		0.111	0.446	2
06141	Selenium	7782-49-2	0.273	J	0.0446	0.446	2
06142	Silver	7440-22-4	0.0321	J	0.0134	0.111	2
06145	Thallium	7440-28-0	0.538		0.0334	0.111	2
06148	Vanadium	7440-62-2	90.2		0.0245	0.111	2
06149	Zinc	7440-66-6	117		0.624	3.34	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0030	U	0.0030	0.106	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.8		0.90	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1	U	10.1	33.8	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23	U	0.23	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	455		10.0	10.0	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163616
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL103 SDG#: DE036-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.99	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 05:40	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/24/2010 04:13	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 13:33	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 08:02	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/23/2010 00:19	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/28/2010 17:09	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1

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

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163616
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL103 SDG#: DE036-18

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/28/2010 16:22	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:44	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:46	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:29	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:29	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:29	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:29	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:48	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 21:50	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 02:31	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/06/2011 00:02	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163617
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL089 SDG#: DE036-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Butylbenzylphthalate	85-68-7	99,000		1,800	18,000	100
04688	Di-n-butylphthalate	84-74-2	210		18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	330	J	18	360	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163617
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL089 SDG#: DE036-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	540	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 3,3'-dichlorobenzidine						
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8	1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	2.4		0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	3.4		0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	9.2		0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	2.5		0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	7.3		0.71	1.8	1
10138	Chrysene	218-01-9	6.5		0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.0	J	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluoranthene	206-44-0	4.0		0.71	1.8	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.8		0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	10	J	6.4	19	1
10138	Phenanthrene	85-01-8	1.8	J	0.71	1.8	1
10138	Pyrene	129-00-0	3.9		0.71	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	1.7	U	1.7	1.8	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.86	U	0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86	U	0.86	1.8	1
10401	MCPA	94-74-6	81	U	81	270	1
10401	MCPP (Mecoprop)	93-65-2	80	U	80	270	1
10401	2,4,5-T	93-76-5	0.088	J	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163617
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL089 SDG#: DE036-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.071	U	0.071	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.066	U	0.066	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.058	U	0.058	0.18	1
01363	Chlordane	57-74-9	6.6	U	6.6	6.6	1
01363	p,p-DDD	72-54-8	0.071	U	0.071	0.36	1
01363	p,p-DDE	72-55-9	1.1	U	1.1	1.1	1
01363	p,p-DDT	50-29-3	1.7	U	1.7	1.7	1
01363	Delta BHC	319-86-8	0.039	U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.56	U	0.56	0.56	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.12	U	0.12	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.071	U	0.071	0.36	1
01363	Endrin	72-20-8	0.071	U	0.071	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.36	U	0.36	0.36	1
01363	Endrin Ketone	53494-70-5	0.071	U	0.071	0.36	1
01363	Heptachlor	76-44-8	0.17	U	0.17	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.23	U	0.23	0.23	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.071	U	0.071	0.36	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.1	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	5.4	U	5.4	18	5
10225	Aroclor 5442	12642-23-8	5.4	U	5.4	18	5
10225	Aroclor 5460	11126-42-4	6.6	J	5.4	18	5
10225	PCB-1016	12674-11-2	1.8	U	1.8	9.1	5
10225	PCB-1221	11104-28-2	2.7	U	2.7	9.1	5
10225	PCB-1232	11141-16-5	2.8	U	2.8	9.1	5
10225	PCB-1242	53469-21-9	2.7	U	2.7	9.1	5
10225	PCB-1248	12672-29-6	30		1.8	9.1	5
10225	PCB-1254	11097-69-1	13		1.8	9.1	5
10225	PCB-1260	11096-82-5	6.6	J	1.8	9.1	5
10225	PCB-1262	37324-23-5	1.8	U	1.8	9.1	5
10225	PCB-1268	11100-14-4	1.8	U	1.8	9.1	5
	The stated QC limits are advisory only until sufficient data points						

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163617
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL089 SDG#: DE036-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,900		5.23	20.8	1
07914	Boron	7440-42-8	8.79		0.926	5.20	1
01650	Calcium	7440-70-2	18,700		6.38	20.8	1
01654	Iron	7439-89-6	20,600		4.90	20.8	1
01656	Lithium	7439-93-2	21.7		0.23	2.1	1
01657	Magnesium	7439-95-4	4,940		2.64	10.4	1
06958	Manganese	7439-96-5	277		0.0812	0.520	1
10145	Phosphorus	7723-14-0	543		0.583	10.4	1
01662	Potassium	7440-09-7	3,240		18.7	52.0	1
01667	Sodium	7440-23-5	205		38.8	104	1
07968	Strontium	7440-24-6	50.5		0.0645	0.520	1
06969	Tin	7440-31-5	2.20	J	1.04	10.4	1
06970	Titanium	7440-32-6	1,200		0.388	1.02	1
10146	Zirconium	7440-67-7	3.43	J	0.874	5.20	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.297		0.0637	0.212	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.50		0.0637	0.424	2
06126	Barium	7440-39-3	155		0.287	1.06	5
06127	Beryllium	7440-41-7	0.654		0.0170	0.106	2
06128	Cadmium	7440-43-9	0.664		0.0382	0.106	2
06131	Chromium	7440-47-3	38.6		0.127	0.424	2
06132	Cobalt	7440-48-4	7.96		0.0212	0.106	2
06133	Copper	7440-50-8	19.4		0.0700	0.424	2
06135	Lead	7439-92-1	34.0		0.0110	0.212	2
06138	Molybdenum	7439-98-7	11.2		0.0531	0.106	2
06139	Nickel	7440-02-0	19.8		0.106	0.424	2
06141	Selenium	7782-49-2	0.123	J	0.0424	0.424	2
06142	Silver	7440-22-4	0.0831	J	0.0127	0.106	2
06145	Thallium	7440-28-0	0.288		0.0318	0.106	2
06148	Vanadium	7440-62-2	56.6		0.0233	0.106	2
06149	Zinc	7440-66-6	150		0.594	3.18	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.155		0.0030	0.103	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.86	U	0.86	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	32.2	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.58	J	0.21	1.1	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163617
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL089 SDG#: DE036-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	429	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.58	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 06:14	Gregory J Drahovsky	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 10:53	Joseph M Gambler	100
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/24/2010 04:46	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 14:55	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 08:32	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/23/2010 00:38	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
07914	Boron	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
01650	Calcium	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
01654	Iron	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163617
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL089 SDG#: DE036-19

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
01657	Magnesium	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
06958	Manganese	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
10145	Phosphorus	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
01662	Potassium	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
01667	Sodium	SW-846 6010B	1	103515708004	12/24/2010 10:19	Tara L Snyder	1
07968	Strontium	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
06969	Tin	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
06970	Titanium	SW-846 6010B	1	103555708003	12/22/2010 13:48	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103515708004	12/21/2010 01:50	Tara L Snyder	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/28/2010 16:23	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:32	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:32	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:32	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:49	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103555708003	12/21/2010 13:14	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 22:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/30/2010 02:55	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/06/2011 00:26	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL236 SDG#: DE036-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	28	J	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

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

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL236 SDG#: DE036-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 3,3'-dichlorobenzidine						
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	2.2		0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	3.6		0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.71	U	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	3.7		0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.71	U	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	J	6.4	19	1
10138	Chrysene	218-01-9	13		0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.7	J	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluoranthene	206-44-0	1.7	J	0.71	1.8	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.6	J	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	11	J	6.4	19	1
10138	Phenanthrene	85-01-8	1.1	J	0.71	1.8	1
10138	Pyrene	129-00-0	2.7		0.71	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	8.2		0.66	1.8	1
10401	Dicamba	1918-00-9	0.45	J	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	610		81	270	1
10401	MCPP (Mecoprop)	93-65-2	480	U	480	480	1
10401	2,4,5-T	93-76-5	0.33		0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory						

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

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL236 SDG#: DE036-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported. Due to interfering peaks on the chromatogram, the values reported for MCPP represent the lowest reporting limits attainable.						
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.2	U	2.2	5.3	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070	U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.17	U	0.17	0.36	1
01363	p,p-DDT	50-29-3	0.47	U	0.47	0.47	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.11	U	0.11	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.13	U	0.13	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	5.3	U	5.3	18	5
10225	Aroclor 5442	12642-23-8	5.3	U	5.3	18	5
10225	Aroclor 5460	11126-42-4	5.3	U	5.3	18	5
10225	PCB-1016	12674-11-2	1.8	U	1.8	9.0	5
10225	PCB-1221	11104-28-2	2.7	U	2.7	9.0	5
10225	PCB-1232	11141-16-5	2.8	U	2.8	9.0	5
10225	PCB-1242	53469-21-9	2.7	U	2.7	9.0	5
10225	PCB-1248	12672-29-6	1.8	U	1.8	9.0	5
10225	PCB-1254	11097-69-1	77		1.8	9.0	5
10225	PCB-1260	11096-82-5	1.8	U	1.8	9.0	5
10225	PCB-1262	37324-23-5	1.8	U	1.8	9.0	5
10225	PCB-1268	11100-14-4	1.8	U	1.8	9.0	5
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						

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

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL236 SDG#: DE036-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,800		5.29	21.0	1
07914	Boron	7440-42-8	7.12		0.936	5.26	1
01650	Calcium	7440-70-2	12,100		6.45	21.0	1
01654	Iron	7439-89-6	24,100		4.96	21.0	1
01656	Lithium	7439-93-2	23.6		0.23	2.1	1
01657	Magnesium	7439-95-4	5,690		2.67	10.5	1
06958	Manganese	7439-96-5	301		0.0821	0.526	1
10145	Phosphorus	7723-14-0	546		0.589	10.5	1
01662	Potassium	7440-09-7	4,170		18.9	52.6	1
01667	Sodium	7440-23-5	160		39.2	105	1
07968	Strontium	7440-24-6	38.4		0.0652	0.526	1
06969	Tin	7440-31-5	2.25	J	1.05	10.5	1
06970	Titanium	7440-32-6	1,180		0.400	1.05	1
10146	Zirconium	7440-67-7	1.19	J	0.884	5.26	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.152	J	0.0625	0.208	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.85		0.0625	0.417	2
06126	Barium	7440-39-3	130		0.113	0.417	2
06127	Beryllium	7440-41-7	0.538		0.0167	0.104	2
06128	Cadmium	7440-43-9	0.377		0.0375	0.104	2
06131	Chromium	7440-47-3	27.9		0.125	0.417	2
06132	Cobalt	7440-48-4	8.08		0.0208	0.104	2
06133	Copper	7440-50-8	14.7		0.0688	0.417	2
06135	Lead	7439-92-1	10.6		0.0108	0.208	2
06138	Molybdenum	7439-98-7	0.843		0.0521	0.104	2
06139	Nickel	7440-02-0	16.9		0.104	0.417	2
06141	Selenium	7782-49-2	0.160	J	0.0417	0.417	2
06142	Silver	7440-22-4	0.0265	J	0.0125	0.104	2
06145	Thallium	7440-28-0	0.295		0.0313	0.104	2
06148	Vanadium	7440-62-2	49.6		0.0229	0.104	2
06149	Zinc	7440-66-6	115		0.583	3.13	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0341	J	0.0028	0.0993	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.85	U	0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	31.9	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.1	1

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

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL236 SDG#: DE036-20*

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	405	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.55	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10350SLG026	01/14/2011 06:48	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350SLH026	12/29/2010 04:30	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10350SLH026	12/17/2010 17:40	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10350SLG026	12/17/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103550017A	12/28/2010 15:23	John W Perkins	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103500019A	12/21/2010 19:18	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510030A	12/31/2010 08:46	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510031A	12/29/2010 01:50	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510030A	12/20/2010 07:00	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510031A	12/20/2010 07:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103550017A	12/22/2010 01:15	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103500019A	12/17/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
07914	Boron	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1

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

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL236 SDG#: DE036-20*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
01654	Iron	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
01656	Lithium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
06958	Manganese	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
01662	Potassium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
01667	Sodium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
07968	Strontium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
06969	Tin	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
06970	Titanium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103545708005	12/21/2010 21:27	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026002D	12/26/2010 10:35	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026002C	12/26/2010 10:35	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026002B	12/26/2010 10:35	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026002A	12/26/2010 10:35	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711003	12/20/2010 06:51	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708004	12/19/2010 11:27	James L Mertz	1
05708	SW SW846 ICP Digest	SW-846 3050B	2	103545708005	12/20/2010 20:07	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026002	12/19/2010 12:47	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711003	12/19/2010 13:41	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11003003201B	01/04/2011 22:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	10362362204B	12/29/2010 22:06	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11004243201A	01/06/2011 00:34	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11003003201B	01/03/2011 14:26	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	10362362204B	12/28/2010 15:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10349182102B	12/15/2010 14:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10349039402B	12/15/2010 14:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11004243201A	01/04/2011 20:45	Daniel S Smith	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163618
LLI Group # 1225222
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10

Submitted: 12/14/2010 10:05
Reported: 01/14/2011 23:09

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

SL236 SDG#: DE036-20*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

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

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225222
Reported: 01/14/11 at 11:09 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10350SLG026	Sample number(s): 6163596-6163601,6163603-6163618									
Acenaphthene	17	U	17.	170	ug/kg	98		76-111		
Acenaphthylene	17	U	17.	170	ug/kg	99		75-122		
Aniline	170 U		170.	500	ug/kg	42		10-107		
Anthracene	17	U	17.	170	ug/kg	97		76-112		
Benzidine	1,200 U		1,200.	3,300	ug/kg	32		15-121		
Benzo(a)anthracene	17	U	17.	170	ug/kg	99		73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	92		69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	93		61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	97		65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	94		67-125		
Benzoic acid	170 U		170.	500	ug/kg	65		10-154		
Benzyl alcohol	170 U		170.	500	ug/kg	79		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	91		79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	80		75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	86		79-112		
Carbazole	17	U	17.	170	ug/kg	99		77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	88		74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	59		10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	98		70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	86		70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	88		68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	83		67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	92		72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	96		79-110		
Chrysene	17	U	17.	170	ug/kg	100		76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	98		70-128		
Dibenzofuran	17	U	17.	170	ug/kg	100		79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	86		79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	87		70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	88		74-106		
3,3'-Dichlorobenzidine	100 U		100.	330	ug/kg	31*		38-105		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	94		75-111		
Diethylphthalate	17	U	17.	170	ug/kg	97		76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	97		72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	103		70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	98		77-109		
4,6-Dinitro-2-methylphenol	170 U		170.	500	ug/kg	70		53-110		
2,4-Dinitrophenol	670 U		670.	2,000	ug/kg	67		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	94		73-115		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225222
Reported: 01/14/11 at 11:09 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	96		79-115		
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	103		77-111		
bis(2-Ethylhexyl)phthalate	17	U	17.	330	ug/kg	83		75-117		
Fluoranthene	17	U	17.	170	ug/kg	98		78-116		
Fluorene	17	U	17.	170	ug/kg	99		75-116		
Hexachlorobenzene	17	U	17.	170	ug/kg	96		78-116		
Hexachlorobutadiene	67	U	67.	170	ug/kg	96		70-112		
Hexachlorocyclopentadiene	170	U	170.	500	ug/kg	95		46-115		
Hexachloroethane	17	U	17.	170	ug/kg	84		68-105		
Indeno(1,2,3-cd)pyrene	17	U	17.	170	ug/kg	97		64-119		
Isophorone	17	U	17.	170	ug/kg	86		69-110		
1-Methylnaphthalene	17	U	17.	170	ug/kg	98		74-105		
2-Methylnaphthalene	17	U	17.	170	ug/kg	91		76-105		
2-Methylphenol	33	U	33.	170	ug/kg	92		66-110		
4-Methylphenol	33	U	33.	170	ug/kg	88		66-117		
Naphthalene	17	U	17.	170	ug/kg	93		73-106		
2-Nitroaniline	17	U	17.	170	ug/kg	90		78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	85		62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	60		49-98		
Nitrobenzene	17	U	17.	170	ug/kg	99		71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	88		81-114		
4-Nitrophenol	170	U	170.	500	ug/kg	98		56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	76		63-107		
N-Nitrosodimethylamine	33	U	33.	170	ug/kg	82		60-106		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	100		67-141		
Di-n-octylphthalate	17	U	17.	170	ug/kg	69		68-130		
Pentachlorophenol	170	U	170.	500	ug/kg	70		35-106		
Phenanthrene	17	U	17.	170	ug/kg	99		77-113		
Phenol	17	U	17.	170	ug/kg	96		58-112		
Pyrene	17	U	17.	170	ug/kg	99		75-115		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	92		73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	96		76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	93		78-111		
Batch number: 10350SLH026	Sample number(s): 6163596-6163601,6163603-6163618									
Acenaphthene	0.67	U	0.67	1.7	ug/kg	87		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	93		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	95		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	93		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	93		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	105		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	89		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	94		66-137		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	107		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	109		84-132		
Chrysene	0.33	U	0.33	1.7	ug/kg	93		79-120		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	88		62-142		
Diethylphthalate	6.0	U	6.0	18	ug/kg	112		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	103		70-130		
Bis(2-Ethylhexyl)phthalate	8.2	J	6.0	18	ug/kg	121		67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	97		78-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	96		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	88		62-141		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	89		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	80		62-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225222
Reported: 01/14/11 at 11:09 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Naphthalene	0.67	U	0.67	1.7	ug/kg	84		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	92		39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	110		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	92		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	96		56-121		
Batch number: 103550017A	Sample number(s): 6163596-6163601,6163603-6163618									
2,4-D	1.2	U	1.2	3.6	ug/kg	107		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	57		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	100		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	73		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	6*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	90		60-141		
MCPA	76	U	76.	250	ug/kg	80		34-113		
MCPP (Mecoprop)	75	U	75.	250	ug/kg	92		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	80		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	73		48-138		
Batch number: 103500019A	Sample number(s): 6163618									
6a Perchlorate EPA 6850	7.0		2.1	5.0	ug/kg	120*		85-115		
Batch number: 103510030A	Sample number(s): 6163596-6163601,6163603-6163618									
Aldrin	0.066	U	0.066	0.17	ug/kg	87		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	97		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	84		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	103		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	127		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	103		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	128		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	88		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	100		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	97		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	102		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	105		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	112		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	92		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	105		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	124		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	97		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	130*		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					
Batch number: 103510031A	Sample number(s): 6163596-6163601,6163603-6163618									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	80	74*	75-125	7	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	84		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	103		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225222
Reported: 01/14/11 at 11:09 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 103511026002A	Sample number(s): 6163596-6163618									
Antimony	0.0577	U	0.0577	0.192	mg/kg	55		11-208		
Arsenic	0.0577	U	0.0577	0.385	mg/kg	95		80-120		
Beryllium	0.0154	U	0.0154	0.0962	mg/kg	98		82-118		
Cadmium	0.0346	U	0.0346	0.0962	mg/kg	92		82-118		
Chromium	0.115	U	0.115	0.385	mg/kg	105		80-120		
Cobalt	0.0192	U	0.0192	0.0962	mg/kg	99		82-118		
Copper	0.242	J	0.0635	0.385	mg/kg	104		80-120		
Lead	0.0100	U	0.0100	0.192	mg/kg	96		80-120		
Nickel	0.0962	U	0.0962	0.385	mg/kg	102		80-120		
Silver	0.0115	U	0.0115	0.0962	mg/kg	93		66-134		
Thallium	0.0288	U	0.0288	0.0962	mg/kg	98		81-119		
Vanadium	0.0212	U	0.0212	0.0962	mg/kg	90		90-110		
Zinc	0.538	U	0.538	2.88	mg/kg	97		78-122		
Batch number: 103511026002B	Sample number(s): 6163596-6163618									
Selenium	0.0385	U	0.0385	0.385	mg/kg	94		79-122		
Batch number: 103511026002C	Sample number(s): 6163596-6163618									
Molybdenum	0.0481	U	0.0481	0.0962	mg/kg	92		78-122		
Batch number: 103511026002D	Sample number(s): 6163596-6163618									
Barium	0.104	U	0.104	0.385	mg/kg	98		79-121		
Batch number: 103515708004	Sample number(s): 6163596-6163617									
Aluminum	7.29	J	5.03	20.0	mg/kg	86		61-110		
Boron	0.890	U	0.890	5.00	mg/kg	86		78-110		
Calcium	12.8	J	6.13	20.0	mg/kg	90		88-110		
Iron	4.71	U	4.71	20.0	mg/kg	84		61-110		
Lithium	0.22	U	0.22	2.0	mg/kg	101		80-120		
Magnesium	2.54	U	2.54	10.0	mg/kg	88		82-110		
Manganese	0.0780	U	0.0780	0.500	mg/kg	95		81-119		
Phosphorus	1.08	J	0.560	10.0	mg/kg	98		80-120		
Potassium	18.0	U	18.0	50.0	mg/kg	89		78-110		
Sodium	37.3	U	37.3	100	mg/kg	90		87-110		
Strontium	0.0650	J	0.0620	0.500	mg/kg	97		79-121		
Tin	1.20	J	1.00	10.0	mg/kg	97		90-114		
Zirconium	0.840	U	0.840	5.00	mg/kg	99		80-120		
Batch number: 103515711003	Sample number(s): 6163596-6163618									
Mercury	0.0028	U	0.0028	0.0977	mg/kg	97		88-123		
Batch number: 103545708005	Sample number(s): 6163618									
Aluminum	5.43	J	5.03	20.0	mg/kg	106		61-110		
Boron	0.890	U	0.890	5.00	mg/kg	94		78-110		
Calcium	12.3	J	6.13	20.0	mg/kg	103		88-110		
Iron	4.71	U	4.71	20.0	mg/kg	105		61-110		
Lithium	0.22	U	0.22	2.0	mg/kg	103		80-120		
Magnesium	2.54	U	2.54	10.0	mg/kg	104		82-110		
Manganese	0.0780	U	0.0780	0.500	mg/kg	101		81-119		
Phosphorus	1.70	J	0.560	10.0	mg/kg	106		80-120		
Potassium	18.0	U	18.0	50.0	mg/kg	102		78-110		
Sodium	37.3	U	37.3	100	mg/kg	102		87-110		
Strontium	0.0620	U	0.0620	0.500	mg/kg	106		79-121		
Tin	1.37	J	1.00	10.0	mg/kg	98		90-114		
Titanium	0.380	U	0.380	1.00	mg/kg	110		80-120		
Zirconium	0.840	U	0.840	5.00	mg/kg	103		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225222
Reported: 01/14/11 at 11:09 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 103555708003	Sample number(s): 6163596-6163617									
Titanium	0.365	U	0.365	0.962	mg/kg	99		80-120		
Batch number: 10362362204A	Sample number(s): 6163596-6163600,6163602-6163608									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	100		85-115		
Batch number: 10362362204B	Sample number(s): 6163609-6163618									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	100		85-115		
Batch number: 11003003201A	Sample number(s): 6163596-6163600,6163602-6163608									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	93		90-110		
Batch number: 11003003201B	Sample number(s): 6163609-6163618									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	93		90-110		
Batch number: 11004243201A	Sample number(s): 6163596-6163600,6163602-6163618									
3a Cr VI by EPA 7199	0.20	U	0.20	1.0	mg/kg	93		80-120		
Batch number: 10349039402A	Sample number(s): 6163596-6163599,6163602-6163607									
22a pH by 9045C						100		95-105		
Batch number: 10349039402B	Sample number(s): 6163608-6163618									
22a pH by 9045C						100		95-105		
Batch number: 10349182102A	Sample number(s): 6163596-6163599,6163602-6163607									
Oxidation Reduction Potential						99		98-102		
Batch number: 10349182102B	Sample number(s): 6163608-6163618									
Oxidation Reduction Potential						99		98-102		
Batch number: 10349162403A	Sample number(s): 6163596-6163598									
28a Moisture Content by 160.3						100		80-120		
Batch number: 10349162403B	Sample number(s): 6163599-6163618									
28a Moisture Content by 160.3						100		80-120		
28a Moisture Content by 160.3						100		80-120		
28a Moisture Content by 160.3						100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10350SLG026	Sample number(s): 6163596-6163601,6163603-6163618 UNSPK: 6163599								
Acenaphthene	99	97	75-115	2	30				
Acenaphthylene	103	98	49-126	5	30				
Aniline	49	37	14-114	28	30				
Anthracene	100	98	75-115	2	30				
Benzidine	16*	20*	35-141	22	30				
Benzo(a)anthracene	101	102	65-122	0	30				
Benzo(a)pyrene	86	87	57-126	1	30				
Benzo(b)fluoranthene	90	88	59-125	2	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225222
Reported: 01/14/11 at 11:09 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(g,h,i)perylene	91	90	59-127	1	30				
Benzo(k)fluoranthene	90	88	56-132	2	30				
Benzoic acid	45	33	10-173	31*	30				
Benzyl alcohol	87	88	55-123	1	30				
4-Bromophenyl-phenylether	91	93	67-129	2	30				
Butylbenzylphthalate	97	101	73-134	4	30				
Di-n-butylphthalate	94	93	67-123	1	30				
Carbazole	100	98	64-120	3	30				
4-Chloro-3-methylphenol	93	93	53-130	0	30				
4-Chloroaniline	73	61	23-95	18	30				
bis(2-Chloroethoxy)methane	100	98	54-117	3	30				
bis(2-Chloroethyl)ether	97	93	60-116	5	30				
bis(2-Chloroisopropyl)ether	90	90	55-142	0	30				
2-Chloronaphthalene	82	78	50-141	5	30				
2-Chlorophenol	93	94	73-121	1	30				
4-Chlorophenyl-phenylether	97	93	64-119	4	30				
Chrysene	104	102	62-128	1	30				
Dibenz(a,h)anthracene	91	90	65-125	0	30				
Dibenzofuran	102	96	71-112	6	30				
1,2-Dichlorobenzene	91	90	66-108	0	30				
1,3-Dichlorobenzene	90	89	63-109	2	30				
1,4-Dichlorobenzene	92	87	53-113	5	30				
3,3'-Dichlorobenzidine	72	56	25-123	25	30				
2,4-Dichlorophenol	99	97	78-117	2	30				
Diethylphthalate	94	93	66-118	2	30				
2,4-Dimethylphenol	97	95	56-130	2	30				
3,5-Dimethylphenol	103	104	70-130	0	30				
Dimethylphthalate	97	94	64-118	3	30				
4,6-Dinitro-2-methylphenol	64	49	10-148	26	30				
2,4-Dinitrophenol	40	25	20-143	47*	30				
2,4-Dinitrotoluene	94	91	57-114	3	30				
2,6-Dinitrotoluene	97	95	69-123	3	30				
1,2-Diphenylhydrazine	107	105	71-129	2	30				
bis(2-Ethylhexyl)phthalate	97	100	63-122	3	30				
Fluoranthene	101	97	59-122	4	30				
Fluorene	98	95	60-125	3	30				
Hexachlorobenzene	97	97	61-111	0	30				
Hexachlorobutadiene	96	97	62-120	1	30				
Hexachlorocyclopentadiene	89	84	10-153	6	30				
Hexachloroethane	85	86	57-109	2	30				
Indeno(1,2,3-cd)pyrene	92	90	61-126	2	30				
Isophorone	90	91	51-118	1	30				
1-Methylnaphthalene	99	96	73-112	4	30				
2-Methylnaphthalene	93	91	76-114	2	30				
2-Methylphenol	93	92	47-142	1	30				
4-Methylphenol	88	91	55-126	3	30				
Naphthalene	94	90	72-116	4	30				
2-Nitroaniline	99	97	67-125	2	30				
3-Nitroaniline	95	86	59-122	10	30				
4-Nitroaniline	78	62	52-112	23	30				
Nitrobenzene	99	97	51-114	1	30				
2-Nitrophenol	90	87	74-115	4	30				
4-Nitrophenol	94	89	39-133	5	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225222
Reported: 01/14/11 at 11:09 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
N-Nitroso-di-n-propylamine	80	84	60-116	5	30				
N-Nitrosodimethylamine	87	84	47-116	3	30				
N-Nitrosodiphenylamine	100	98	86-145	2	30				
Di-n-octylphthalate	80	83	56-126	4	30				
Pentachlorophenol	87	71	17-149	19	30				
Phenanthrene	101	100	65-125	2	30				
Phenol	97	95	58-126	2	30				
Pyrene	103	106	51-151	3	30				
1,2,4-Trichlorobenzene	97	94	72-115	2	30				
2,4,5-Trichlorophenol	94	93	34-139	2	30				
2,4,6-Trichlorophenol	100	95	49-140	4	30				
Batch number: 10350SLH026	Sample number(s): 6163596-6163601,6163603-6163618 UNSPK: 6163599								
Acenaphthene	90	90	63-105	1	30				
Acenaphthylene	49*	52*	55-126	2	30				
Anthracene	78	77	46-136	0	30				
Benzo(a)anthracene	-87*	-90*	39-144	3	30				
Benzo(a)pyrene	-461 (2)	-441 (2)	34-156	12	30				
Benzo(b)fluoranthene	-1536 (2)	-1472 (2)	43-155	18	30				
Benzo(g,h,i)perylene	-401 (2)	-387 (2)	33-141	9	30				
Benzo(k)fluoranthene	-148*	-137*	42-144	10	30				
Butylbenzylphthalate	112	117	73-140	5	30				
Di-n-butylphthalate	109	111	78-160	1	30				
Chrysene	-1058 (2)	-999 (2)	29-156	24	30				
Dibenz(a,h)anthracene	-49*	-47*	41-130	2	30				
Diethylphthalate	105	107	87-131	2	30				
Dimethylphthalate	100	100	74-118	0	30				
Bis(2-Ethylhexyl)phthalate	87	88	39-167	1	30				
Fluoranthene	-326 (2)	-323 (2)	26-166	2	30				
Fluorene	94	94	45-121	1	30				
Indeno(1,2,3-cd)pyrene	-643 (2)	-617 (2)	21-143	15	30				
1-Methylnaphthalene	93	92	72-123	0	30				
2-Methylnaphthalene	81	81	28-121	1	30				
Naphthalene	79	79	61-102	0	30				
N-Nitrosodimethylamine	97	101	48-113	4	30				
Di-n-octylphthalate	101	99	40-192	2	30				
Phenanthrene	-43*	-40*	12-165	3	30				
Pyrene	-111*	-113*	15-153	1	30				
Batch number: 103550017A	Sample number(s): 6163596-6163601,6163603-6163618 UNSPK: 6163599								
2,4-D	95	70	28-161	31	35				
Dalapon	81	0*	12-86	200*	50				
2,4-DB	42	81	20-170	62*	50				
Dicamba	154*	127*	33-120	20	50				
Dinoseb	13	15	1-44	21	35				
2,4-DP (Dichlorprop)	114	111	55-141	2	50				
MCPA	140	171	31-184	20	50				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225222
Reported: 01/14/11 at 11:09 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
MCPP (Mecoprop)	80	61	16-174	28	50				
2,4,5-T	61	30	25-132	68*	35				
2,4,5-TP	81	92	10-183	13	35				
Batch number: 103500019A	Sample number(s): 6163618 UNSPK: P163599								
6a Perchlorate EPA 6850	100	100	80-120	0	20				
Batch number: 103510030A	Sample number(s): 6163596-6163601,6163603-6163618 UNSPK: 6163599								
Aldrin	132*	94	16-126	34	50				
Alpha BHC	109	115	10-129	5	50				
Beta BHC	84	122	14-147	36	50				
Gamma BHC - Lindane	127	124	10-140	2	50				
p,p-DDD	119	110	16-163	8	50				
p,p-DDE	127	103	18-161	21	50				
p,p-DDT	168	245*	10-176	37	50				
Delta BHC	94	125	23-140	29	50				
Dieldrin	0*	127	19-154	200*	50				
Endosulfan I	85	82	16-137	4	50				
Endosulfan II	90	63	28-154	35	50				
Endosulfan Sulfate	97	121	21-160	22	50				
Endrin	0*	112	11-149	200*	50				
Endrin Aldehyde	115	90	10-148	24	35				
Endrin Ketone	110	73	22-165	41	50				
Heptachlor	0*	115	13-126	200*	50				
Heptachlor Epoxide	126	103	13-157	20	50				
Methoxychlor	125	115	32-147	8	50				
Batch number: 103510031A	Sample number(s): 6163596-6163601,6163603-6163618 UNSPK: 6163599								
PCB-1016	120	114	29-146	5	50				
PCB-1260	109	128	39-149	11	50				
Batch number: 103511026002A	Sample number(s): 6163596-6163618 UNSPK: 6163599 BKG: 6163599								
Antimony	40*	20*	75-125	56*	20	0.0956 J	0.0577 U	200* (1)	20
Arsenic	188*	166*	75-125	6	20	5.78	7.26	23*	20
Beryllium	146*	142*	75-125	5	20	0.649	1.00	43*	20
Cadmium	133*	139*	75-125	1	20	0.197	0.254	25* (1)	20
Chromium	160*	157*	75-125	2	20	23.9	25.8	8	20
Cobalt	127*	126*	75-125	4	20	6.89	8.56	22*	20
Copper	138*	151*	75-125	3	20	11.2	15.6	33*	20
Lead	179*	193*	75-125	1	20	8.60	12.5	37*	20
Nickel	136*	143*	75-125	1	20	13.9	18.9	31*	20
Silver	123	129*	75-125	1	20	0.226	0.364	47* (1)	20
Thallium	120	121	75-125	2	20	0.334	0.313	6 (1)	20
Vanadium	204 (2)	201 (2)	75-125	2	20	42.0	48.4	14	20
Zinc	222 (2)	321 (2)	75-125	7	20	92.3	109	16	20
Batch number: 103511026002B	Sample number(s): 6163596-6163618 UNSPK: 6163599 BKG: 6163599								
Selenium	88	87	75-125	5	20	0.0876 J	0.0954 J	9 (1)	20
Batch number: 103511026002C	Sample number(s): 6163596-6163618 UNSPK: 6163599 BKG: 6163599								
Molybdenum	134*	134*	75-125	4	20	0.581	0.551	5	20
Batch number: 103511026002D	Sample number(s): 6163596-6163618 UNSPK: 6163599 BKG: 6163599								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225222
Reported: 01/14/11 at 11:09 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Barium	313 (2)	247 (2)	75-125	5	20	112	149	28*	20
Batch number: 103515708004	Sample number(s): 6163596-6163617 UNSPK: 6163599 BKG: 6163599								
Aluminum	1507 (2)	1477 (2)	75-125	1	20	13,500	13,700	1	20
Boron	89	89	84-115	5	20	3.89 J	3.80 J	2 (1)	20
Calcium	167 (2)	189 (2)	75-125	4	20	2,790	2,960	6	20
Iron	1042 (2)	1161 (2)	75-125	1	20	19,400	19,600	1	20
Lithium	98	97	82-114	3	20	22.4	21.8	3	20
Magnesium	265 (2)	220 (2)	75-125	1	20	4,200	4,390	4	20
Manganese	149 (2)	139 (2)	75-125	0	20	232	242	4	20
Phosphorus	76	89	75-125	4	20	353	367	4	20
Potassium	119	120	75-125	2	20	2,510	2,350	6	20
Sodium	93	93	75-125	5	20	102	107	5 (1)	20
Strontium	95	95	75-115	4	20	15.7	17.5	11	20
Tin	89	89	80-110	5	20	2.25 J	2.19 J	3 (1)	20
Zirconium	96	95	75-125	4	20	0.945 J	1.60 J	52* (1)	20
Batch number: 103515711003	Sample number(s): 6163596-6163618 UNSPK: 6163599 BKG: 6163599								
Mercury	74	78	65-135	2	20	0.313	0.263	17 (1)	20
Batch number: 103545708005	Sample number(s): 6163618 UNSPK: P162903 BKG: P162903								
Aluminum	1617 (2)	1782 (2)	75-125	1	20	17,100	16,400	4	20
Boron	94	96	84-115	0	20	6.45	6.32	2 (1)	20
Calcium	147 (2)	180 (2)	75-125	4	20	2,170	2,080	4	20
Iron	104 (2)	-167 (2)	75-125	1	20	19,000	18,100	5	20
Lithium	96	102	82-114	3	20	16.5	15.3	8	20
Magnesium	82 (2)	144 (2)	75-125	3	20	3,420	3,260	5	20
Manganese	6 (2)	25 (2)	75-125	2	20	449	413	9	20
Phosphorus	92	96	75-125	1	20	168	164	3	20
Potassium	108	133*	75-125	6	20	2,330	2,180	7	20
Sodium	102	108	75-125	4	20	110	106	4 (1)	20
Strontium	100	103	75-115	1	20	19.6	19.5	0	20
Tin	88	88	80-110	2	20	2.07 J	2.14 J	3 (1)	20
Titanium	302 (2)	338 (2)	75-125	2	20	1,210	1,190	2	20
Zirconium	95	99	75-125	2	20	2.49 J	2.90 J	15 (1)	20
Batch number: 103555708003	Sample number(s): 6163596-6163617 UNSPK: 6163599 BKG: 6163599								
Titanium	445 (2)	352 (2)	75-125	6	20	1,060	1,220	14	20
Batch number: 10362362204A	Sample number(s): 6163596-6163600,6163602-6163608 UNSPK: 6163599 BKG: 6163599								
7a Perchlorate EPA 314.0	96		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 10362362204B	Sample number(s): 6163609-6163618 UNSPK: 6163618 BKG: 6163618								
7a Perchlorate EPA 314.0	96		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11003003201A	Sample number(s): 6163596-6163600,6163602-6163608 UNSPK: 6163599 BKG: 6163599								
11a Anions by 300.0 - Fluoride	78*		80-120			3.2	2.5	24* (1)	20
Batch number: 11003003201B	Sample number(s): 6163609-6163618 UNSPK: 6163610 BKG: 6163610								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225222
Reported: 01/14/11 at 11:09 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
11a Anions by 300.0 - Fluoride	81		80-120			0.80	U	0.80	U	0 (1)	20
Batch number: 11004243201A	Sample number(s): 6163596-6163600,6163602-6163618 UNSPK: 6163599 BKG: 6163599										
3a Cr VI by EPA 7199	93		75-125			0.20	U	0.33	J	200* (1)	20
Batch number: 10349039402A	Sample number(s): 6163596-6163599,6163602-6163607 BKG: 6163599										
22a pH by 9045C						7.67		7.60		1	1
Batch number: 10349039402B	Sample number(s): 6163608-6163618 BKG: 6163618										
22a pH by 9045C						7.55		7.56		0	1
Batch number: 10349182102A	Sample number(s): 6163596-6163599,6163602-6163607 BKG: 6163599										
Oxidation Reduction Potential						462		472		2	6
Batch number: 10349182102B	Sample number(s): 6163608-6163618 BKG: 6163618										
Oxidation Reduction Potential						405		411		2	6
Batch number: 10349162403A	Sample number(s): 6163596-6163598 BKG: 6163597										
28a Moisture Content by 160.3						8.6		8.6		0	20
Batch number: 10349162403B	Sample number(s): 6163599-6163618 BKG: 6163599										
28a Moisture Content by 160.3						6.3		6.5		2	20
28a Moisture Content by 160.3						6.3		6.5		2	20
28a Moisture Content by 160.3						6.3		6.5		2	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 10350SLG026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6163596	101	98	99	81	91	97
6163597	101	97	104	82	88	98
6163598	99	93	105	80	90	102
6163599	88	90	90	73	97	89
6163600	91	91	99	86	94	89
6163601	89	90	96	86	92	92
6163603	95	93	97	79	87	92
6163604	99	95	100	79	91	106
6163605	97	93	98	82	89	100
6163606	98	91	100	82	89	97
6163607	96	92	101	81	90	101
6163608	103	98	103	81	94	100
6163609	96	90	104	82	92	101
6163610	95	93	94	83	91	96
6163611	88	87	94	81	88	96
6163612	96	92	99	82	93	101

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225222
Reported: 01/14/11 at 11:09 PM

Surrogate Quality Control

6163613	94	92	90	81	88	93
6163614	88	85	95	75	90	94
6163615	94	92	97	81	91	97
6163616	97	95	100	80	90	105
6163617	96	92	98	81	94	100
6163618	97	92	97	84	95	102
Blank	80	81	80	67	91	90
LCS	88	89	96	83	92	88
MS	91	91	99	86	94	89
MSD	89	90	96	86	92	92
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10350SLH026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6163596	73	58	55
6163597	96	82	84
6163598	92	82	85
6163599	92	83	91
6163600	95	84	87
6163601	98	85	87
6163603	96	81	84
6163604	90	79	76
6163605	99	87	87
6163606	97	89	86
6163607	95	81	75
6163608	87	82	86
6163609	90	80	81
6163610	83	77	78
6163611	93	83	86
6163612	87	79	84
6163613	98	88	89
6163614	95	83	85
6163615	89	80	84
6163616	89	78	83
6163617	96	84	89
6163618	87	77	96
Blank	94	85	94
LCS	99	87	98
MS	95	84	87
MSD	98	85	87
Limits:	40-130	45-130	45-135

Analysis Name: 12a Pesticides by 8081A
Batch number: 103510030A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6163596	79	86
6163597	77	91
6163598	67	82
6163599	72	46
6163600	86	178*
6163601	75	0*
6163603	84	251*
6163604	116	0*

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225222
Reported: 01/14/11 at 11:09 PM

Surrogate Quality Control

6163605	74	95
6163606	81	99
6163607	74	73
6163608	59	57
6163609	60	68
6163610	82	89
6163611	72	56
6163612	72	83
6163613	76	78
6163614	82	83
6163615	78	82
6163616	70	79
6163617	83	80
6163618	85	94
Blank	63	106
LCS	75	100
MS	86	178*
MSD	75	0*
Limits:	50-130	20-120

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 103510031A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6163596	105	107
6163597	106	113
6163598	97	111
6163599	99	87
6163600	122	116
6163601	114	97
6163603	90	129*
6163604	96	409*
6163605	125	131*
6163606	111	152*
6163607	102	91
6163608	123	122*
6163609	106	94
6163610	91	107
6163611	124	139*
6163612	101	107
6163613	97	101
6163614	113	125*
6163615	100	107
6163616	108	128*
6163617	109	160*
6163618	110	138*
Blank	109	117
LCS	90	101
LCSD	93	107
MS	122	116
MSD	114	97
Limits:	53-139	45-120

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 103550017A

	2,4-Dichlorophenylacetic

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225222
Reported: 01/14/11 at 11:09 PM

Surrogate Quality Control

	acid
6163596	97
6163597	94
6163598	118
6163599	135
6163600	145
6163601	127
6163603	106
6163604	85
6163605	110
6163606	103
6163607	97
6163608	119
6163609	130
6163610	173*
6163611	109
6163612	125
6163613	94
6163614	87
6163615	138
6163616	97
6163617	149
6163618	118
Blank	99
LCS	102
MS	145
MSD	127
Limits:	36-156

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

A# 13013 1225222 G1G3596-18

CHAIN OF CUSTODY RECORD

Amended COC

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-cFH EPA 8015B Mod.	*Metals EPA 6010/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
DUP04-SA5B-QC-121310	12.13.10	1015	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										dup
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	dup
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	5 Encore Samplers	x	x		x																				dup
EB01-SA5B-121310	12.13.10	1215	water	none	6-1 liter amber			x						x	x			x	x										rinsate
EB01-SA5B-121310	12.13.10	1215	water	none	1-500 ml poly							x	x			x									x				rinsate
EB01-SA5B-121310	12.13.10	1215	water	HNO3	1-500 ml poly						x																		rinsate
EB01-SA5B-121310	12.13.10	1215	water	HCl	6-40 mL amber VOA vials	x	x																						
SED-029-SIV-SD-0.0-0.5	12.13.10	1152	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SED-030-SIV-SD-0.0-0.5	12.13.10	1113	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SED-031-SIV-SD-0.0-0.5	12.13.10	0920	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SED-032-SIV-SD-0.0-0.5	12.13.10	1457	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x	x	x	x										
SED-033-SIV-SD-0.0-0.5	12.13.10	1540	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SED-040-SIV-SD-0.0-0.5	12.13.10	1019	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-001-SA5C-SB-4.0-5.0	12.13.10	1608	soil	none	3 x 4 oz. jars & 3 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	
SL-001-SA5C-SB-4.5	12.13.10	1604	soil	none	5 Encore Samplers	x	x		x																				
SL-001-SA5C-SB-9.0-10.0	12.13.10	1616	soil	none	3 x 4 oz. jars & 3 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	
SL-001-SA5C-SB-9.5	12.13.10	1612	soil	none	5 Encore Samplers	x	x		x																				
SL-003-SA5C-SB-4.0-5.0	12.13.10	1437	soil	none	3 x 4 oz. jars & 3 16 oz. jars			x		x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	
SL-003-SA5C-SB-4.5	12.13.10	1433	soil	none	5 Encore Samplers	x	x		x																				
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	8 x 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	MS sample
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	4 x 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	MS sample
SL-006-SA5C-SB-4.5MS	12.13.10	0943	soil	none	15 Encore Samplers	x	x		x																				MS sample
SL-006-SA5C-SB-9.0-10.0	12.13.10	0955	soil	none	3 x 4 oz. jars & 3 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	
SL-006-SA5C-SB-9.5	12.13.10	0953	soil	none	5 Encore Samplers	x	x		x																				
SL-007-SA5B-SS-0.0-0.5	12.13.10	1004	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x	x	x	x										
SL-007-SA5C-SB-4.5	12.13.10	1200	soil	none	5 Encore Samplers	x	x		x																				

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-EFH EPA 8015B Mod.	*Metals EPA 6010/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-007-SA5C-SB-4.0-5.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	
SL-007-SA5C-SB-9.0-10.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	
SL-007-SA5C-SB-9.5	12.13.10	1210	soil	none	5 Encore Samplers	x	x		x																			
SL-071-SA5B-SS-0.0-0.5MS	12.13.10	1009	soil	none	2 x 16 oz. jarS & 2 6" sleeves			x			x	x	x	x	x	x		x	x									MS sample
SL-072-SA5B-SS-0.0-0.5	12.13.10	0948	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-073-SA5B-SS-0.0-0.5	12.13.10	0930	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-074-SA5B-SS-0.0-0.5	12.13.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-075-SA5B-SS-0.0-0.5	12.13.10	0903	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-076-SA5B-SS-0.0-0.5	12.13.10	0928	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-078-SA5B-SS-0.0-0.5	12.13.10	1110	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-083-SA5B-SS-0.0-0.5	12.13.10	1049	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-084-SA5B-SS-0.0-0.5	12.13.10	1046	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	5 Encore Samplers	x	x		x																			
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar					x										x	x	x	x	x	x	x	x	
SL-086-SA5B-SS-0.0-0.5	12.13.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-087-SA5B-SS-0.0-0.5	12.13.10	1317	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-089-SA5B-SS-0.0-0.5	12.13.10	1410	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-091-SA5B-SS-0.0-0.5	12.13.10	1510	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-092-SA5B-SS-0.0-0.5	12.13.10	1327	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-095-SA5B-SS-0.0-0.5	12.13.10	1440	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-103-SA5B-SS-0.0-0.5	12.13.10	1425	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-139-SA5B-SS-0.0-0.5	12.13.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									
SL-236-SA5B-SS-0.0-0.5	12.13.10	1310	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x	x	x	x									
SL-301-SA5B-SS-0.0-0.5	12.13.10	0900	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x									

13013 1225222 61163596-618

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, labwill measure pH and ORP

Samplers: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270-SIM	TPH-GRO EPA 8015B	TPH-EPH EPA 8015B Mod.	*Metals EPA 6010/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	**Pesticides EPA 8081A (surface soil only)	**Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-006-SA5C-SB-9.0-10.0	12.13.10	0955	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	dup
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	8 x 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	MS sample
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	4 x 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	MS sample
EB-15-SA5B-121310	12.13.10	1215	water	none	6-1 liter amber			X						X	X			X	X										rinsate
EB-15-SA5B-121310	12.13.10	1215	water	none	1-500 ml poly							X	X			X													rinsate
EB-15-SA5B-121310	12.13.10	1215	water	HNO3	1-500 ml poly						X																		rinsate
EB-15-SA5B-121310	12.13.10	1215	water	HCl	6-40 mL amber VOA vials	X	X																						rinsate
SL-006-SA5C-SB-4.5MS	12.13.10	0943	soil	none	15 Encore Samplers	X	X		X																				MS sample
SL-006-SA5C-SB-9.5	12.13.10	0953	soil	none	5 Encore Samplers	X	X		X																				
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	5 Encore Samplers	X	X		X																				dup
SL-007-SA5C-SB-9.5	12.13.10	1210	soil	none	5 Encore Samplers	X	X		X																				
SL-007-SA5C-SB-4.0-5.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-007-SA5C-SB-9.0-10.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-075-SA5B-SS-0.0-0.5	12.13.10	0903	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-007-SA5B-SS-0.0-0.5	12.13.10	1004	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-007-SA5B-SS-4.5	12.13.10	1200	soil	none	5 Encore Samplers	X	X		X																				
SL-078-SA5B-SS-0.0-0.5	12.13.10	1110	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-084-SA5B-SS-0.0-0.5	12.13.10	1046	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-076-SA5B-SS-0.0-0.5	12.13.10	0928	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-071-SA5B-SS-0.0-0.5MS	12.13.10	1009	soil	none	2 x 16 oz. jarS & 2 6" sleeves			X			X	X	X	X	X	X	X	X	X										MS sample
SL-139-SA5B-SS-0.0-0.5	12.13.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-083-SA5B-SS-0.0-0.5	12.13.10	1049	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-074-SA5B-SS-0.0-0.5	12.13.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-301-SA5B-SS-0.0-0.5	12.13.10	0900	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-073-SA5B-SS-0.0-0.5	12.13.10	0930	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-072-SA5B-SS-0.0-0.5	12.13.10	0948	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
DUP04-SA5B-QC-121310	12.13.10	1015	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										dup
SED-029-SIV-SD-0.0-0.5	12.13.10	1152	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-031-SIV-SD-0.0-0.5	12.13.10	0920	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-030-SIV-SD-0.0-0.5	12.13.10	1113	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-040-SIV-SD-0.0-0.5	12.13.10	1019	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-086-SA5B-SS-0.0-0.5	12.13.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-092-SA5B-SS-0.0-0.5	12.13.10	1327	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-103-SA5B-SS-0.0-0.5	12.13.10	1425	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-089-SA5B-SS-0.0-0.5	12.13.10	1410	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-236-SA5B-SS-0.0-0.5	12.13.10	1310	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	5 Encore Samplers	X	X		X																				
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar															X	X	X	X	X	X	X			
SL-087-SA5B-SS-0.0-0.5	12.13.10	1317	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-095-SA5B-SS-0.0-0.5	12.13.10	1440	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-091-SA5B-SS-0.0-0.5	12.13.10	1510	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-003-SA5C-SB-4.0-5.0	12.13.10	1437	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-003-SA5C-SB-4.5	12.13.10	1433	soil	none	5 Encore Samplers	X	X		X																				
SL-001-SA5C-SB-4.0-5.0	12.13.10	1608	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-001-SA5C-SB-9.0-10.0	12.13.10	1616	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-001-SA5C-SB-4.5	12.13.10	1604	soil	none	5 Encore Samplers	X	X		X																				
SL-001-SA5C-SB-9.5	12.13.10	1612	soil	none	5 Encore Samplers	X	X		X																				
SED-032-SIV-SD-0.0-0.5	12.13.10	1457	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-033-SIV-SD-0.0-0.5	12.13.10	1540	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Other Instructions and Notes
Received by: (Signature)	12/13/10 1630	AGAR No. 00700007 32992	12/14/10 1005	Laboratory: Lancaster Laboratories, Inc. 4 coolers

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

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

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

March 11, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/14/2010
Group Number: 1225224
SDG: DX020
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-078-SA5B-SS-0.0-0.5 Soil	6163633
SL-084-SA5B-SS-0.0-0.5 Soil	6163634
SL-076-SA5B-SS-0.0-0.5 Soil	6163635
SL-071-SA5B-SS-0.0-0.5 Soil	6163636
SL-071-SA5B-SS-0.0-0.5MS Soil	6163637
SL-071-SA5B-SS-0.0-0.5MSD Soil	6163638
SL-139-SA5B-SS-0.0-0.5 Soil	6163639
SL-083-SA5B-SS-0.0-0.5 Soil	6163640
SL-074-SA5B-SS-0.0-0.5 Soil	6163641
SL-301-SA5B-SS-0.0-0.5 Soil	6163642
SL-073-SA5B-SS-0.0-0.5 Soil	6163643
SL-072-SA5B-SS-0.0-0.5 Soil	6163644
DUP04-SA5B-QC-121310 Soil	6163645
SED-029-SIV-SD-0.0-0.5 Sediment	6163646
SED-031-SIV-SD-0.0-0.5 Sediment	6163647
SED-030-SIV-SD-0.0-0.5 Sediment	6163648
SED-040-SIV-SD-0.0-0.5 Sediment	6163649
SL-086-SA5B-SS-0.0-0.5 Soil	6163650
SL-092-SA5B-SS-0.0-0.5 Soil	6163651
SL-103-SA5B-SS-0.0-0.5 Soil	6163652
SL-089-SA5B-SS-0.0-0.5 Soil	6163653
SL-236-SA5B-SS-0.0-0.5 Soil	6163654

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

Lancaster Laboratories

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

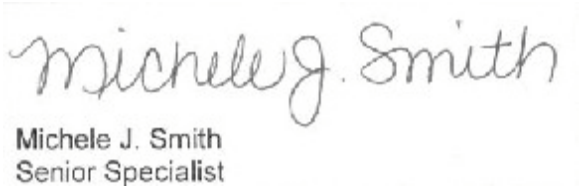
Analysis Report

ELECTRONIC COPY TO CDM Federal Services Program Attn: Todd Burgesser

1 COPY TO Data Package Group

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

Respectfully Submitted,



Michele J. Smith
Senior Specialist

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-078-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-078-SA5B-SS-0.0-0.5

LLI Sample # SW 6163633
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS078 SDG#: DX020-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	9.3	0.50	0.50	1

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

Sample Description: SL-078-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-078-SA5B-SS-0.0-0.5

LLI Sample # SW 6163633
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS078 SDG#: DX020-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.134	JQ	0.0423	1.10	1
11031	12378-PeCDD	40321-76-4	0.0916	U	0.0916	5.51	1
11031	123478-HxCDD	39227-28-6	2.52	JB	0.126	5.51	1
11031	123678-HxCDD	57653-85-7	9.75		0.134	5.51	1
11031	123789-HxCDD	19408-74-3	4.70	JB	0.136	5.51	1
11031	1234678-HpCDD	35822-46-9	270	B	0.318	5.51	1
11031	OCDD	3268-87-9	2,640	B	0.372	11.0	1
11031	2378-TCDF	51207-31-9	0.812	JQ	0.121	1.10	1
11031	12378-PeCDF	57117-41-6	1.82	JB	0.0585	5.51	1
11031	23478-PeCDF	57117-31-4	1.69	JB	0.0505	5.51	1
11031	123478-HxCDF	70648-26-9	1.49	JB	0.0946	5.51	1
11031	123678-HxCDF	57117-44-9	1.57	JB	0.0947	5.51	1
11031	123789-HxCDF	72918-21-9	1.05	JB	0.109	5.51	1
11031	234678-HxCDF	60851-34-5	1.89	JB	0.0987	5.51	1
11031	1234678-HpCDF	67562-39-4	26.8	B	0.140	5.51	1
11031	1234789-HpCDF	55673-89-7	2.45	JB	0.146	5.51	1
11031	OCDF	39001-02-0	60.6	B	0.113	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	64	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	45	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	64	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	43	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: **SL-078-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-078-SA5B-SS-0.0-0.5

LLI Sample # SW 6163633
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS078 SDG#: DX020-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-078-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-078-SA5B-SS-0.0-0.5

LLI Sample # SW 6163633
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:10 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS078 SDG#: DX020-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 17:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403A	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-084-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5B-SS-0.0-0.5

LLI Sample # SW 6163634
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS084 SDG#: DX020-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.6	0.50	0.50	1

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

Sample Description: SL-084-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5B-SS-0.0-0.5

LLI Sample # SW 6163634
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS084 SDG#: DX020-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.104	J	0.0324	1.09	1
11031	12378-PeCDD	40321-76-4	0.883	JBQ	0.0534	5.47	1
11031	123478-HxCDD	39227-28-6	1.97	JB	0.0405	5.47	1
11031	123678-HxCDD	57653-85-7	3.90	J	0.0411	5.47	1
11031	123789-HxCDD	19408-74-3	4.33	JB	0.0418	5.47	1
11031	1234678-HpCDD	35822-46-9	129	B	0.0714	5.47	1
11031	OCDD	3268-87-9	1,090	B	0.100	10.9	1
11031	2378-TCDF	51207-31-9	0.114	J	0.0345	1.09	1
11031	12378-PeCDF	57117-41-6	0.257	JB	0.0260	5.47	1
11031	23478-PeCDF	57117-31-4	0.239	JB	0.0246	5.47	1
11031	123478-HxCDF	70648-26-9	1.01	JB	0.0333	5.47	1
11031	123678-HxCDF	57117-44-9	1.28	JB	0.0306	5.47	1
11031	123789-HxCDF	72918-21-9	0.379	JB	0.0399	5.47	1
11031	234678-HxCDF	60851-34-5	1.75	JB	0.0322	5.47	1
11031	1234678-HpCDF	67562-39-4	23.4	B	0.0330	5.47	1
11031	1234789-HpCDF	55673-89-7	2.04	JB	0.0493	5.47	1
11031	OCDF	39001-02-0	55.4	B	0.0671	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	90	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SL-084-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-084-SA5B-SS-0.0-0.5

LLI Sample # SW 6163634
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS084 SDG#: DX020-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-084-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5B-SS-0.0-0.5

LLI Sample # SW 6163634
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:46 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS084 SDG#: DX020-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 18:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403A	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-076-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-076-SA5B-SS-0.0-0.5

LLI Sample # SW 6163635
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS076 SDG#: DX020-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.9	0.50	0.50	1

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

Sample Description: SL-076-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-076-SA5B-SS-0.0-0.5

LLI Sample # SW 6163635
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS076 SDG#: DX020-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0232	U	0.0232	1.06	1
11031	12378-PeCDD	40321-76-4	0.293	JB	0.0348	5.31	1
11031	123478-HxCDD	39227-28-6	0.447	JBQ	0.0292	5.31	1
11031	123678-HxCDD	57653-85-7	0.984	J	0.0313	5.31	1
11031	123789-HxCDD	19408-74-3	0.899	JB	0.0309	5.31	1
11031	1234678-HpCDD	35822-46-9	19.9	B	0.0499	5.31	1
11031	OCDD	3268-87-9	157	B	0.0635	10.6	1
11031	2378-TCDF	51207-31-9	0.152	JQ	0.0387	1.06	1
11031	12378-PeCDF	57117-41-6	0.211	JB	0.0192	5.31	1
11031	23478-PeCDF	57117-31-4	0.270	JBQ	0.0179	5.31	1
11031	123478-HxCDF	70648-26-9	0.350	JB	0.0286	5.31	1
11031	123678-HxCDF	57117-44-9	0.360	JB	0.0256	5.31	1
11031	123789-HxCDF	72918-21-9	0.190	JB	0.0335	5.31	1
11031	234678-HxCDF	60851-34-5	0.373	JB	0.0275	5.31	1
11031	1234678-HpCDF	67562-39-4	3.62	JB	0.0240	5.31	1
11031	1234789-HpCDF	55673-89-7	0.468	JB	0.0356	5.31	1
11031	OCDF	39001-02-0	7.92	JB	0.0502	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	94	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SL-076-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-076-SA5B-SS-0.0-0.5

LLI Sample # SW 6163635
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS076 SDG#: DX020-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-076-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-076-SA5B-SS-0.0-0.5

LLI Sample # SW 6163635
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:28 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS076 SDG#: DX020-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 19:37	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403A	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-071-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163636
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS071 SDG#: DX020-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.3	0.50	0.50	1

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

Sample Description: SL-071-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163636
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS071 SDG#: DX020-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.581	J	0.0464	1.07	1
11031	12378-PeCDD	40321-76-4	5.45	BQ	0.0800	5.34	1
11031	123478-HxCDD	39227-28-6	14.0	B	0.0757	5.34	1
11031	123678-HxCDD	57653-85-7	27.7		0.0791	5.34	1
11031	123789-HxCDD	19408-74-3	30.6	B	0.0783	5.34	1
11031	1234678-HpCDD	35822-46-9	869	B	0.166	5.34	1
11031	OCDD	3268-87-9	7,170	EB	0.212	10.7	1
11031	2378-TCDF	51207-31-9	0.449	J	0.0918	1.07	1
11031	12378-PeCDF	57117-41-6	1.12	JB	0.0374	5.34	1
11031	23478-PeCDF	57117-31-4	1.66	JB	0.0359	5.34	1
11031	123478-HxCDF	70648-26-9	7.50	B	0.0759	5.34	1
11031	123678-HxCDF	57117-44-9	8.83	B	0.0687	5.34	1
11031	123789-HxCDF	72918-21-9	1.09	JB	0.0850	5.34	1
11031	234678-HxCDF	60851-34-5	12.8	B	0.0725	5.34	1
11031	1234678-HpCDF	67562-39-4	169	B	0.0580	5.34	1
11031	1234789-HpCDF	55673-89-7	13.6	B	0.0819	5.34	1
11031	OCDF	39001-02-0	362	B	0.0697	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	86	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SL-071-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163636
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS071 SDG#: DX020-04BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-071-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163636
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS071 SDG#: DX020-04BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 20:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-071-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163637
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS071 SDG#: DX020-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.3	0.50	0.50	1

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

Sample Description: SL-071-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163637
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS071 SDG#: DX020-04MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.1		0.0419	1.07	1
11031	12378-PeCDD	40321-76-4	106	B	0.0783	5.34	1
11031	123478-HxCDD	39227-28-6	122	B	0.0622	5.34	1
11031	123678-HxCDD	57653-85-7	126		0.0624	5.34	1
11031	123789-HxCDD	19408-74-3	134	B	0.0620	5.34	1
11031	1234678-HpCDD	35822-46-9	788	B	0.127	5.34	1
11031	OCDD	3268-87-9	5,720	EB	0.158	10.7	1
11031	2378-TCDF	51207-31-9	21.8		0.0864	1.07	1
11031	12378-PeCDF	57117-41-6	109	B	0.0332	5.34	1
11031	23478-PeCDF	57117-31-4	108	B	0.0331	5.34	1
11031	123478-HxCDF	70648-26-9	117	B	0.0874	5.34	1
11031	123678-HxCDF	57117-44-9	117	B	0.0732	5.34	1
11031	123789-HxCDF	72918-21-9	117	B	0.101	5.34	1
11031	234678-HxCDF	60851-34-5	123	B	0.0836	5.34	1
11031	1234678-HpCDF	67562-39-4	234	B	0.0550	5.34	1
11031	1234789-HpCDF	55673-89-7	126	B	0.0970	5.34	1
11031	OCDF	39001-02-0	513	B	0.0705	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	89	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: **SL-071-SA5B-SS-0.0-0.5MS Soil**
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163637
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS071 SDG#: DX020-04MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SL-071-SA5B-SS-0.0-0.5MS Soil**
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163637
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS071 SDG#: DX020-04MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 21:30	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-071-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163638
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS071 SDG#: DX020-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.3	0.50	0.50	1

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

Sample Description: SL-071-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163638
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS071 SDG#: DX020-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	20.0		0.0502	1.07	1
11031	12378-PeCDD	40321-76-4	112	B	0.0935	5.34	1
11031	123478-HxCDD	39227-28-6	124	B	0.0721	5.34	1
11031	123678-HxCDD	57653-85-7	136		0.0723	5.34	1
11031	123789-HxCDD	19408-74-3	142	B	0.0732	5.34	1
11031	1234678-HpCDD	35822-46-9	1,100	B	0.207	5.34	1
11031	OCDD	3268-87-9	8,240	EB	0.263	10.7	1
11031	2378-TCDF	51207-31-9	20.9		0.0990	1.07	1
11031	12378-PeCDF	57117-41-6	109	B	0.0487	5.34	1
11031	23478-PeCDF	57117-31-4	108	B	0.0451	5.34	1
11031	123478-HxCDF	70648-26-9	121	B	0.108	5.34	1
11031	123678-HxCDF	57117-44-9	120	B	0.0961	5.34	1
11031	123789-HxCDF	72918-21-9	115	B	0.110	5.34	1
11031	234678-HxCDF	60851-34-5	129	B	0.102	5.34	1
11031	1234678-HpCDF	67562-39-4	305	B	0.0848	5.34	1
11031	1234789-HpCDF	55673-89-7	126	B	0.117	5.34	1
11031	OCDF	39001-02-0	669	B	0.0979	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	61	28 - 130
13C12-123789-HxCDD	62	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	56	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	61	26 - 123
13C12-234678-HxCDF	59	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	67	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: **SL-071-SA5B-SS-0.0-0.5MSD Soil**
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163638
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS071 SDG#: DX020-04MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-071-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-071-SA5B-SS-0.0-0.5

LLI Sample # SW 6163638
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:09 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS071 SDG#: DX020-04MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 22:27	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-139-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-139-SA5B-SS-0.0-0.5

LLI Sample # SW 6163639
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS139 SDG#: DX020-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	12.2	0.50	0.50	1

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

Sample Description: SL-139-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-139-SA5B-SS-0.0-0.5

LLI Sample # SW 6163639
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS139 SDG#: DX020-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0268	U	0.0268	1.14	1
11031	12378-PeCDD	40321-76-4	0.0836	U	0.0836	5.69	1
11031	123478-HxCDD	39227-28-6	0.492	JBQ	0.0391	5.69	1
11031	123678-HxCDD	57653-85-7	1.32	JQ	0.0391	5.69	1
11031	123789-HxCDD	19408-74-3	0.936	JB	0.0397	5.69	1
11031	1234678-HpCDD	35822-46-9	35.3	B	0.0632	5.69	1
11031	OCDD	3268-87-9	830	B	0.0745	11.4	1
11031	2378-TCDF	51207-31-9	0.800	JQ	0.107	1.14	1
11031	12378-PeCDF	57117-41-6	9.17	B	0.0386	5.69	1
11031	23478-PeCDF	57117-31-4	0.892	JB	0.0375	5.69	1
11031	123478-HxCDF	70648-26-9	1.16	JB	0.0543	5.69	1
11031	123678-HxCDF	57117-44-9	1.06	JB	0.0457	5.69	1
11031	123789-HxCDF	72918-21-9	0.862	JB	0.0665	5.69	1
11031	234678-HxCDF	60851-34-5	0.695	JB	0.0541	5.69	1
11031	1234678-HpCDF	67562-39-4	6.38	B	0.0530	5.69	1
11031	1234789-HpCDF	55673-89-7	0.794	JB	0.0940	5.69	1
11031	OCDF	39001-02-0	11.8	B	0.0416	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	93	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SL-139-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-139-SA5B-SS-0.0-0.5

LLI Sample # SW 6163639
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS139 SDG#: DX020-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-139-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-139-SA5B-SS-0.0-0.5

LLI Sample # SW 6163639
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:04 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS139 SDG#: DX020-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/04/2011 23:23	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-083-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-083-SA5B-SS-0.0-0.5

LLI Sample # SW 6163640
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS083 SDG#: DX020-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	7.8	0.50	0.50	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-083-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-083-SA5B-SS-0.0-0.5

LLI Sample # SW 6163640
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS083 SDG#: DX020-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.506	U	0.506	1.08	1
11031	12378-PeCDD	40321-76-4	1.06	U	1.06	5.42	1
11031	123478-HxCDD	39227-28-6	3.49	JB	0.763	5.42	1
11031	123678-HxCDD	57653-85-7	10.9	Q	0.770	5.42	1
11031	123789-HxCDD	19408-74-3	8.13	B	0.824	5.42	1
11031	1234678-HpCDD	35822-46-9	307	B	0.907	5.42	1
11031	OCDD	3268-87-9	4,950	EB	1.10	10.8	1
11031	2378-TCDF	51207-31-9	26.8		3.35	1.08	1
11650	2378-TCDF-Conf	51207-31-9	31.2		0.292	1.08	1
11031	12378-PeCDF	57117-41-6	35.0	B	0.981	5.42	1
11031	23478-PeCDF	57117-31-4	274	B	0.979	5.42	1
11031	123478-HxCDF	70648-26-9	189	B	1.02	5.42	1
11031	123678-HxCDF	57117-44-9	86.7	B	0.877	5.42	1
11031	123789-HxCDF	72918-21-9	44.1	B	1.23	5.42	1
11031	234678-HxCDF	60851-34-5	47.3	B	1.00	5.42	1
11031	1234678-HpCDF	67562-39-4	139	B	0.486	5.42	1
11031	1234789-HpCDF	55673-89-7	87.1	B	0.702	5.42	1
11031	OCDF	39001-02-0	294	B	0.588	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-2378-TCDF-Conf	76	24 - 169
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SL-083-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-083-SA5B-SS-0.0-0.5

LLI Sample # SW 6163640
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS083 SDG#: DX020-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-083-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-083-SA5B-SS-0.0-0.5

LLI Sample # SW 6163640
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:49 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS083 SDG#: DX020-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/12/2011 19:18	Nelson H Risser	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	10363001	02/05/2011 16:45	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-074-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SS-0.0-0.5

LLI Sample # SW 6163641
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS074 SDG#: DX020-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.2	0.50	0.50	1

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

Sample Description: SL-074-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SS-0.0-0.5

LLI Sample # SW 6163641
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS074 SDG#: DX020-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.132	JQ	0.0253	1.09	1
11031	12378-PeCDD	40321-76-4	0.0593	U	0.0593	5.45	1
11031	123478-HxCDD	39227-28-6	0.904	JB	0.0477	5.45	1
11031	123678-HxCDD	57653-85-7	2.72	J	0.0479	5.45	1
11031	123789-HxCDD	19408-74-3	2.32	JB	0.0484	5.45	1
11031	1234678-HpCDD	35822-46-9	78.1	B	0.0900	5.45	1
11031	OCDD	3268-87-9	935	B	0.0931	10.9	1
11031	2378-TCDF	51207-31-9	0.333	JQ	0.0728	1.09	1
11031	12378-PeCDF	57117-41-6	0.898	JB	0.0352	5.45	1
11031	23478-PeCDF	57117-31-4	0.692	JB	0.0316	5.45	1
11031	123478-HxCDF	70648-26-9	0.791	JBQ	0.0453	5.45	1
11031	123678-HxCDF	57117-44-9	0.806	JB	0.0411	5.45	1
11031	123789-HxCDF	72918-21-9	0.465	JBQ	0.0502	5.45	1
11031	234678-HxCDF	60851-34-5	0.994	JB	0.0438	5.45	1
11031	1234678-HpCDF	67562-39-4	12.2	B	0.0590	5.45	1
11031	1234789-HpCDF	55673-89-7	1.25	JBQ	0.0777	5.45	1
11031	OCDF	39001-02-0	28.1	B	0.0778	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: **SL-074-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SS-0.0-0.5

LLI Sample # SW 6163641
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS074 SDG#: DX020-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-074-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SS-0.0-0.5

LLI Sample # SW 6163641
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:15 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS074 SDG#: DX020-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 04:19	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-301-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SS-0.0-0.5

LLI Sample # SW 6163642
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS301 SDG#: DX020-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.8	0.50	0.50	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-301-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SS-0.0-0.5

LLI Sample # SW 6163642
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS301 SDG#: DX020-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.205	J	0.0345	1.10	1
11031	12378-PeCDD	40321-76-4	0.0763	U	0.0763	5.48	1
11031	123478-HxCDD	39227-28-6	2.77	JB	0.0402	5.48	1
11031	123678-HxCDD	57653-85-7	8.03		0.0401	5.48	1
11031	123789-HxCDD	19408-74-3	5.87	B	0.0396	5.48	1
11031	1234678-HpCDD	35822-46-9	233	B	0.111	5.48	1
11031	OCDD	3268-87-9	2,320	B	0.121	11.0	1
11031	2378-TCDF	51207-31-9	1.91		0.134	1.10	1
11650	2378-TCDF-Conf	51207-31-9	2.30		0.0768	1.10	1
11031	12378-PeCDF	57117-41-6	3.84	JB	0.0432	5.48	1
11031	23478-PeCDF	57117-31-4	3.89	JB	0.0390	5.48	1
11031	123478-HxCDF	70648-26-9	3.63	JB	0.0633	5.48	1
11031	123678-HxCDF	57117-44-9	3.15	JB	0.0560	5.48	1
11031	123789-HxCDF	72918-21-9	1.07	JBQ	0.0643	5.48	1
11031	234678-HxCDF	60851-34-5	2.78	JB	0.0596	5.48	1
11031	1234678-HpCDF	67562-39-4	36.9	B	0.0575	5.48	1
11031	1234789-HpCDF	55673-89-7	3.98	JB	0.0775	5.48	1
11031	OCDF	39001-02-0	95.2	B	0.0473	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-2378-TCDF-Conf	61	24 - 169
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SL-301-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SS-0.0-0.5

LLI Sample # SW 6163642
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS301 SDG#: DX020-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-301-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SS-0.0-0.5

LLI Sample # SW 6163642
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:00 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS301 SDG#: DX020-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 05:16	Nelson H Risser	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	10363001	02/24/2011 21:55	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-073-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SS-0.0-0.5

LLI Sample # SW 6163643
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS073 SDG#: DX020-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.8	0.50	0.50	1

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

Sample Description: SL-073-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SS-0.0-0.5

LLI Sample # SW 6163643
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS073 SDG#: DX020-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0983	JQ	0.0229	1.05	1
11031	12378-PeCDD	40321-76-4	0.0593	U	0.0593	5.25	1
11031	123478-HxCDD	39227-28-6	0.707	JB	0.0391	5.25	1
11031	123678-HxCDD	57653-85-7	2.21	J	0.0393	5.25	1
11031	123789-HxCDD	19408-74-3	2.00	JB	0.0419	5.25	1
11031	1234678-HpCDD	35822-46-9	58.9	B	0.0622	5.25	1
11031	OCDD	3268-87-9	630	B	0.0836	10.5	1
11031	2378-TCDF	51207-31-9	0.676	JQ	0.0606	1.05	1
11031	12378-PeCDF	57117-41-6	1.36	JB	0.0320	5.25	1
11031	23478-PeCDF	57117-31-4	0.878	JB	0.0278	5.25	1
11031	123478-HxCDF	70648-26-9	1.56	JBQ	0.0394	5.25	1
11031	123678-HxCDF	57117-44-9	1.00	JB	0.0364	5.25	1
11031	123789-HxCDF	72918-21-9	0.708	JBQ	0.0442	5.25	1
11031	234678-HxCDF	60851-34-5	0.833	JB	0.0380	5.25	1
11031	1234678-HpCDF	67562-39-4	8.35	B	0.0509	5.25	1
11031	1234789-HpCDF	55673-89-7	0.908	JB	0.0637	5.25	1
11031	OCDF	39001-02-0	18.6	B	0.0361	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	95	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	91	24 - 185
13C12-23478-PeCDF	93	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	72	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SL-073-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SS-0.0-0.5

LLI Sample # SW 6163643
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS073 SDG#: DX020-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-073-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SS-0.0-0.5

LLI Sample # SW 6163643
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:30 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS073 SDG#: DX020-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 06:13	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-072-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-072-SA5B-SS-0.0-0.5

LLI Sample # SW 6163644
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS072 SDG#: DX020-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.3	0.50	0.50	1

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

Sample Description: SL-072-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-072-SA5B-SS-0.0-0.5

LLI Sample # SW 6163644
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS072 SDG#: DX020-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0243	U	0.0243	1.06	1
11031	12378-PeCDD	40321-76-4	0.860	JB	0.0479	5.28	1
11031	123478-HxCDD	39227-28-6	2.03	JB	0.0301	5.28	1
11031	123678-HxCDD	57653-85-7	5.90		0.0318	5.28	1
11031	123789-HxCDD	19408-74-3	4.17	JB	0.0328	5.28	1
11031	1234678-HpCDD	35822-46-9	182	B	0.0794	5.28	1
11031	OCDD	3268-87-9	1,880	B	0.101	10.6	1
11031	2378-TCDF	51207-31-9	0.731	J	0.0758	1.06	1
11031	12378-PeCDF	57117-41-6	1.51	JB	0.0322	5.28	1
11031	23478-PeCDF	57117-31-4	1.63	JBQ	0.0308	5.28	1
11031	123478-HxCDF	70648-26-9	2.36	JB	0.0401	5.28	1
11031	123678-HxCDF	57117-44-9	1.63	JB	0.0359	5.28	1
11031	123789-HxCDF	72918-21-9	0.786	JB	0.0461	5.28	1
11031	234678-HxCDF	60851-34-5	1.95	JB	0.0393	5.28	1
11031	1234678-HpCDF	67562-39-4	30.1	B	0.0389	5.28	1
11031	1234789-HpCDF	55673-89-7	2.95	JB	0.0561	5.28	1
11031	OCDF	39001-02-0	79.9	B	0.0373	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	62	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Sample Description: **SL-072-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-072-SA5B-SS-0.0-0.5

LLI Sample # SW 6163644
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS072 SDG#: DX020-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-072-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-072-SA5B-SS-0.0-0.5

LLI Sample # SW 6163644
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:48 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS072 SDG#: DX020-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 07:09	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: DUP04-SA5B-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP04-SA5B-QC-121310

LLI Sample # SW 6163645
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DDP04 SDG#: DX020-11FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.9	0.50	0.50	1

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

Lancaster Laboratories

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

Analysis Report

Sample Description: DUP04-SA5B-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP04-SA5B-QC-121310

LLI Sample # SW 6163645
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DDP04 SDG#: DX020-11FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.592	J	0.0427	1.06	1
11031	12378-PeCDD	40321-76-4	6.69	B	0.0868	5.31	1
11031	123478-HxCDD	39227-28-6	18.3	B	0.0637	5.31	1
11031	123678-HxCDD	57653-85-7	35.2		0.0637	5.31	1
11031	123789-HxCDD	19408-74-3	38.7	B	0.0648	5.31	1
11031	1234678-HpCDD	35822-46-9	1,140	B	0.235	5.31	1
11031	OCDD	3268-87-9	8,980	EB	0.261	10.6	1
11031	2378-TCDF	51207-31-9	0.564	J	0.0905	1.06	1
11031	12378-PeCDF	57117-41-6	1.25	JB	0.0429	5.31	1
11031	23478-PeCDF	57117-31-4	1.95	JB	0.0439	5.31	1
11031	123478-HxCDF	70648-26-9	9.88	B	0.0846	5.31	1
11031	123678-HxCDF	57117-44-9	11.0	B	0.0767	5.31	1
11031	123789-HxCDF	72918-21-9	1.42	JB	0.0953	5.31	1
11031	234678-HxCDF	60851-34-5	16.1	B	0.0744	5.31	1
11031	1234678-HpCDF	67562-39-4	223	B	0.103	5.31	1
11031	1234789-HpCDF	55673-89-7	17.8	B	0.138	5.31	1
11031	OCDF	39001-02-0	471	B	0.0996	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: DUP04-SA5B-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP04-SA5B-QC-121310

LLI Sample # SW 6163645
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DDP04 SDG#: DX020-11FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: DUP04-SA5B-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP04-SA5B-QC-121310

LLI Sample # SW 6163645
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:15 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DDP04 SDG#: DX020-11FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 08:06	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-029-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163646
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS029 SDG#: DX020-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	9.7	0.50	0.50	1

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

Sample Description: SED-029-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163646
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS029 SDG#: DX020-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.187	J	0.0386	1.11	1
11031	12378-PeCDD	40321-76-4	1.15	JBQ	0.101	5.54	1
11031	123478-HxCDD	39227-28-6	2.99	JB	0.0579	5.54	1
11031	123678-HxCDD	57653-85-7	6.88		0.0580	5.54	1
11031	123789-HxCDD	19408-74-3	4.22	JB	0.0589	5.54	1
11031	1234678-HpCDD	35822-46-9	182	B	0.127	5.54	1
11031	OCDD	3268-87-9	1,970	B	0.142	11.1	1
11031	2378-TCDF	51207-31-9	1.03	J	0.131	1.11	1
11031	12378-PeCDF	57117-41-6	10.6	B	0.0559	5.54	1
11031	23478-PeCDF	57117-31-4	4.53	JB	0.0504	5.54	1
11031	123478-HxCDF	70648-26-9	2.00	JB	0.0524	5.54	1
11031	123678-HxCDF	57117-44-9	2.44	JB	0.0489	5.54	1
11031	123789-HxCDF	72918-21-9	0.718	JB	0.0576	5.54	1
11031	234678-HxCDF	60851-34-5	3.27	JB	0.0507	5.54	1
11031	1234678-HpCDF	67562-39-4	29.4	B	0.0660	5.54	1
11031	1234789-HpCDF	55673-89-7	1.99	JB	0.0877	5.54	1
11031	OCDF	39001-02-0	106	B	0.0526	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	65	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SED-029-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163646
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS029 SDG#: DX020-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-029-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-029-SIV-SD-0.0-0.5

LLI Sample # SW 6163646
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:52 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS029 SDG#: DX020-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 09:03	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-031-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163647
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS031 SDG#: DX020-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	10	0.50	0.50	1

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

Sample Description: SED-031-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163647
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS031 SDG#: DX020-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0302	JQ	0.0237	1.11	1
11031	12378-PeCDD	40321-76-4	0.385	JB	0.0470	5.56	1
11031	123478-HxCDD	39227-28-6	0.578	JB	0.0416	5.56	1
11031	123678-HxCDD	57653-85-7	3.05	J	0.0390	5.56	1
11031	123789-HxCDD	19408-74-3	1.18	JB	0.0388	5.56	1
11031	1234678-HpCDD	35822-46-9	103	B	0.0878	5.56	1
11031	OCDD	3268-87-9	1,310	B	0.103	11.1	1
11031	2378-TCDF	51207-31-9	0.331	JQ	0.0571	1.11	1
11031	12378-PeCDF	57117-41-6	1.21	JB	0.0304	5.56	1
11031	23478-PeCDF	57117-31-4	0.812	JB	0.0292	5.56	1
11031	123478-HxCDF	70648-26-9	0.593	JB	0.0306	5.56	1
11031	123678-HxCDF	57117-44-9	0.541	JB	0.0277	5.56	1
11031	123789-HxCDF	72918-21-9	0.204	JBQ	0.0354	5.56	1
11031	234678-HxCDF	60851-34-5	0.768	JB	0.0317	5.56	1
11031	1234678-HpCDF	67562-39-4	22.8	B	0.0481	5.56	1
11031	1234789-HpCDF	55673-89-7	1.07	JB	0.0770	5.56	1
11031	OCDF	39001-02-0	99.4	B	0.0466	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	50	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SED-031-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163647
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS031 SDG#: DX020-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-031-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-031-SIV-SD-0.0-0.5

LLI Sample # SW 6163647
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:20 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS031 SDG#: DX020-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/05/2011 09:59	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-030-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163648
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS030 SDG#: DX020-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	16.3	0.50	0.50	1

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

Sample Description: SED-030-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163648
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS030 SDG#: DX020-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.208	U	0.208	1.19	1
11031	12378-PeCDD	40321-76-4	0.254	U	0.254	5.97	1
11031	123478-HxCDD	39227-28-6	0.368	JBQ	0.274	5.97	1
11031	123678-HxCDD	57653-85-7	1.12	J	0.286	5.97	1
11031	123789-HxCDD	19408-74-3	0.836	JBQ	0.284	5.97	1
11031	1234678-HpCDD	35822-46-9	40.6	B	0.566	5.97	1
11031	OCDD	3268-87-9	381	B	0.593	11.9	1
11031	2378-TCDF	51207-31-9	0.318	U	0.318	1.19	1
11031	12378-PeCDF	57117-41-6	1.71	JB	0.170	5.97	1
11031	23478-PeCDF	57117-31-4	0.844	JB	0.172	5.97	1
11031	123478-HxCDF	70648-26-9	0.523	JBQ	0.234	5.97	1
11031	123678-HxCDF	57117-44-9	0.326	JBQ	0.184	5.97	1
11031	123789-HxCDF	72918-21-9	0.287	U	0.287	5.97	1
11031	234678-HxCDF	60851-34-5	0.674	JB	0.223	5.97	1
11031	1234678-HpCDF	67562-39-4	7.35	BQ	0.297	5.97	1
11031	1234789-HpCDF	55673-89-7	0.518	U	0.518	5.97	1
11031	OCDF	39001-02-0	21.5	B	0.446	11.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	58	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	53	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	51	26 - 138
13C12-OCDF	46	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SED-030-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163648
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS030 SDG#: DX020-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-030-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-030-SIV-SD-0.0-0.5

LLI Sample # SW 6163648
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 11:13 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS030 SDG#: DX020-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/12/2011 20:15	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-040-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163649
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS040 SDG#: DX020-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.3	0.50	0.50	1

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

Sample Description: SED-040-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163649
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS040 SDG#: DX020-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.151	U	0.151	1.09	1
11031	12378-PeCDD	40321-76-4	0.316	JBQ	0.149	5.45	1
11031	123478-HxCDD	39227-28-6	0.283	JBQ	0.176	5.45	1
11031	123678-HxCDD	57653-85-7	1.09	JQ	0.168	5.45	1
11031	123789-HxCDD	19408-74-3	0.493	JBQ	0.182	5.45	1
11031	1234678-HpCDD	35822-46-9	25.3	B	0.335	5.45	1
11031	OCDD	3268-87-9	312	B	0.353	10.9	1
11031	2378-TCDF	51207-31-9	0.175	U	0.175	1.09	1
11031	12378-PeCDF	57117-41-6	0.323	JBQ	0.0916	5.45	1
11031	23478-PeCDF	57117-31-4	0.336	JBQ	0.0880	5.45	1
11031	123478-HxCDF	70648-26-9	0.223	JBQ	0.154	5.45	1
11031	123678-HxCDF	57117-44-9	0.133	U	0.133	5.45	1
11031	123789-HxCDF	72918-21-9	0.163	U	0.163	5.45	1
11031	234678-HxCDF	60851-34-5	0.244	JBQ	0.147	5.45	1
11031	1234678-HpCDF	67562-39-4	4.46	JBQ	0.210	5.45	1
11031	1234789-HpCDF	55673-89-7	0.308	U	0.308	5.45	1
11031	OCDF	39001-02-0	15.5	B	0.207	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SED-040-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163649
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS040 SDG#: DX020-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-040-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-040-SIV-SD-0.0-0.5

LLI Sample # SW 6163649
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:19 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS040 SDG#: DX020-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/12/2011 21:12	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163650
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS086 SDG#: DX020-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50	1

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

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163650
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS086 SDG#: DX020-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0913 U	0.0913	1.06	1
11031	12378-PeCDD	40321-76-4	0.110 JBQ	0.0971	5.31	1
11031	123478-HxCDD	39227-28-6	0.109 U	0.109	5.31	1
11031	123678-HxCDD	57653-85-7	0.219 JQ	0.110	5.31	1
11031	123789-HxCDD	19408-74-3	0.260 JBQ	0.118	5.31	1
11031	1234678-HpCDD	35822-46-9	8.11 BQ	0.286	5.31	1
11031	OCDD	3268-87-9	84.9 B	0.160	10.6	1
11031	2378-TCDF	51207-31-9	0.111 U	0.111	1.06	1
11031	12378-PeCDF	57117-41-6	0.0998 JBQ	0.0562	5.31	1
11031	23478-PeCDF	57117-31-4	0.0780 JB	0.0525	5.31	1
11031	123478-HxCDF	70648-26-9	0.0851 U	0.0851	5.31	1
11031	123678-HxCDF	57117-44-9	0.0913 JBQ	0.0763	5.31	1
11031	123789-HxCDF	72918-21-9	0.0982 U	0.0982	5.31	1
11031	234678-HxCDF	60851-34-5	0.152 JBQ	0.0834	5.31	1
11031	1234678-HpCDF	67562-39-4	1.22 JB	0.141	5.31	1
11031	1234789-HpCDF	55673-89-7	0.212 U	0.212	5.31	1
11031	OCDF	39001-02-0	3.30 JB	0.177	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	86	25 - 164
13C12-12378-PeCDD	109	25 - 181
13C12-123478-HxCDD	88	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	100	24 - 185
13C12-23478-PeCDF	96	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	67	17 - 157
13C12-1278-TCDD (CRS)	100	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SL-086-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163650
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS086 SDG#: DX020-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-086-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-086-SA5B-SS-0.0-0.5

LLI Sample # SW 6163650
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:45 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS086 SDG#: DX020-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/12/2011 22:08	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163651
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS092 SDG#: DX020-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1

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

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163651
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS092 SDG#: DX020-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.114	U	0.114	1.13	1
11031	12378-PeCDD	40321-76-4	0.0941	U	0.0941	5.63	1
11031	123478-HxCDD	39227-28-6	0.102	U	0.102	5.63	1
11031	123678-HxCDD	57653-85-7	0.106	U	0.106	5.63	1
11031	123789-HxCDD	19408-74-3	0.170	JBQ	0.100	5.63	1
11031	1234678-HpCDD	35822-46-9	3.82	JB	0.192	5.63	1
11031	OCDD	3268-87-9	32.1	B	0.184	11.3	1
11031	2378-TCDF	51207-31-9	0.117	U	0.117	1.13	1
11031	12378-PeCDF	57117-41-6	0.0672	U	0.0672	5.63	1
11031	23478-PeCDF	57117-31-4	0.0661	U	0.0661	5.63	1
11031	123478-HxCDF	70648-26-9	0.0821	U	0.0821	5.63	1
11031	123678-HxCDF	57117-44-9	0.0722	JBQ	0.0686	5.63	1
11031	123789-HxCDF	72918-21-9	0.0902	U	0.0902	5.63	1
11031	234678-HxCDF	60851-34-5	0.0894	JBQ	0.0796	5.63	1
11031	1234678-HpCDF	67562-39-4	0.724	JBQ	0.0910	5.63	1
11031	1234789-HpCDF	55673-89-7	0.139	U	0.139	5.63	1
11031	OCDF	39001-02-0	1.54	JB	0.173	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	54	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	59	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	52	17 - 157
13C12-1278-TCDD (CRS)	65	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SL-092-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163651
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS092 SDG#: DX020-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-092-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-092-SA5B-SS-0.0-0.5

LLI Sample # SW 6163651
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:27 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS092 SDG#: DX020-17

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/12/2011 23:05	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163652
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS103 SDG#: DX020-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1

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

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163652
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS103 SDG#: DX020-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.127	U	0.127	1.13	1
11031	12378-PeCDD	40321-76-4	0.115	U	0.115	5.63	1
11031	123478-HxCDD	39227-28-6	0.0902	U	0.0902	5.63	1
11031	123678-HxCDD	57653-85-7	0.145	JQ	0.0891	5.63	1
11031	123789-HxCDD	19408-74-3	0.221	JBQ	0.0909	5.63	1
11031	1234678-HpCDD	35822-46-9	1.86	JBQ	0.168	5.63	1
11031	OCDD	3268-87-9	14.4	B	0.162	11.3	1
11031	2378-TCDF	51207-31-9	0.108	U	0.108	1.13	1
11031	12378-PeCDF	57117-41-6	0.0671	U	0.0671	5.63	1
11031	23478-PeCDF	57117-31-4	0.0676	U	0.0676	5.63	1
11031	123478-HxCDF	70648-26-9	0.0711	U	0.0711	5.63	1
11031	123678-HxCDF	57117-44-9	0.0559	U	0.0559	5.63	1
11031	123789-HxCDF	72918-21-9	0.142	JBQ	0.0786	5.63	1
11031	234678-HxCDF	60851-34-5	0.0658	U	0.0658	5.63	1
11031	1234678-HpCDF	67562-39-4	0.363	JBQ	0.0630	5.63	1
11031	1234789-HpCDF	55673-89-7	0.109	U	0.109	5.63	1
11031	OCDF	39001-02-0	0.798	JB	0.163	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SL-103-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163652
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS103 SDG#: DX020-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

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

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-103-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-103-SA5B-SS-0.0-0.5

LLI Sample # SW 6163652
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:25 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS103 SDG#: DX020-18

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/13/2011 00:02	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163653
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS089 SDG#: DX020-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163653
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS089 SDG#: DX020-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0969 U	0.0969	1.07	1
11031	12378-PeCDD	40321-76-4	0.227 U	0.227	5.36	1
11031	123478-HxCDD	39227-28-6	0.383 JB	0.344	5.36	1
11031	123678-HxCDD	57653-85-7	11.9	0.353	5.36	1
11031	123789-HxCDD	19408-74-3	1.04 JBQ	0.350	5.36	1
11031	1234678-HpCDD	35822-46-9	675 B	0.747	5.36	1
11031	OCDD	3268-87-9	10,500 EB	1.47	10.7	1
11031	2378-TCDF	51207-31-9	0.134 U	0.134	1.07	1
11031	12378-PeCDF	57117-41-6	0.132 JBQ	0.0939	5.36	1
11031	23478-PeCDF	57117-31-4	0.285 JBQ	0.0864	5.36	1
11031	123478-HxCDF	70648-26-9	2.30 JBQ	0.298	5.36	1
11031	123678-HxCDF	57117-44-9	0.755 JB	0.269	5.36	1
11031	123789-HxCDF	72918-21-9	0.316 U	0.316	5.36	1
11031	234678-HxCDF	60851-34-5	0.848 JBQ	0.291	5.36	1
11031	1234678-HpCDF	67562-39-4	58.0 B	0.348	5.36	1
11031	1234789-HpCDF	55673-89-7	5.67 B	0.448	5.36	1
11031	OCDF	39001-02-0	376 B	0.257	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	78	25 - 164
13C12-12378-PeCDD	93	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	87	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	78	29 - 147

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

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163653
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS089 SDG#: DX020-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Labeled Compounds	%Rec	Windows
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	69	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-089-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5B-SS-0.0-0.5

LLI Sample # SW 6163653
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:10 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS089 SDG#: DX020-19

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/13/2011 00:58	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163654
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS236 SDG#: DX020-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.9	0.50	0.50	1

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

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163654
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS236 SDG#: DX020-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.334	U	0.334	1.06	1
11031	12378-PeCDD	40321-76-4	0.359	U	0.359	5.31	1
11031	123478-HxCDD	39227-28-6	0.524	JBQ	0.415	5.31	1
11031	123678-HxCDD	57653-85-7	1.21	JQ	0.446	5.31	1
11031	123789-HxCDD	19408-74-3	0.917	JBQ	0.442	5.31	1
11031	1234678-HpCDD	35822-46-9	28.2	B	1.20	5.31	1
11031	OCDD	3268-87-9	316	B	0.938	10.6	1
11031	2378-TCDF	51207-31-9	0.425	U	0.425	1.06	1
11031	12378-PeCDF	57117-41-6	0.457	JBQ	0.262	5.31	1
11031	23478-PeCDF	57117-31-4	1.82	JBQ	0.238	5.31	1
11031	123478-HxCDF	70648-26-9	1.14	JBQ	0.371	5.31	1
11031	123678-HxCDF	57117-44-9	0.810	JB	0.358	5.31	1
11031	123789-HxCDF	72918-21-9	0.595	JBQ	0.383	5.31	1
11031	234678-HxCDF	60851-34-5	0.695	JBQ	0.338	5.31	1
11031	1234678-HpCDF	67562-39-4	4.74	JBQ	0.500	5.31	1
11031	1234789-HpCDF	55673-89-7	0.767	JBQ	0.606	5.31	1
11031	OCDF	39001-02-0	9.75	JB	0.561	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	87	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	65	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

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

Lancaster Laboratories

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

Analysis Report

Sample Description: **SL-236-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163654
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS236 SDG#: DX020-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-236-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-236-SA5B-SS-0.0-0.5

LLI Sample # SW 6163654
LLI Group # 1225224
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:10 by BH

Submitted: 12/14/2010 10:05
Reported: 03/11/2011 14:47

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

DS236 SDG#: DX020-20*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10363001	01/13/2011 01:55	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10363001	12/29/2010 13:00	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162403B	12/15/2010 10:09	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225224
Reported: 03/11/11 at 02:47 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10349162403A	Sample number(s): 6163633-6163635								
28a Moisture Content by 160.3					100		80-120		
Batch number: 10349162403B	Sample number(s): 6163636-6163654								
28a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 10363001	Sample number(s): 6163633-6163654								
2378-TCDD	0.0143 U	0.0143	1.00	ng/kg	93		67-158		
12378-PeCDD	0.0342 J	0.0187	5.00	ng/kg	95		70-142		
123478-HxCDD	0.0175 J	0.0162	5.00	ng/kg	100		70-164		
123678-HxCDD	0.0168 U	0.0168	5.00	ng/kg	99		76-134		
123789-HxCDD	0.0253 J	0.0169	5.00	ng/kg	100		64-162		
1234678-HpCDD	0.120 J	0.0195	5.00	ng/kg	98		70-140		
OCDD	0.267 J	0.0250	10.0	ng/kg	100		78-144		
2378-TCDF	0.0181 U	0.0181	1.00	ng/kg	103		75-158		
2378-TCDF-Conf	0.0398 U	0.0398	1.00	ng/kg					
12378-PeCDF	0.0395 J	0.0115	5.00	ng/kg	100		80-134		
23478-PeCDF	0.0407 J	0.0115	5.00	ng/kg	100		68-160		
123478-HxCDF	0.0536 J	0.0135	5.00	ng/kg	103		72-134		
123678-HxCDF	0.0265 J	0.0114	5.00	ng/kg	103		84-130		
123789-HxCDF	0.0565 J	0.0157	5.00	ng/kg	105		78-130		
234678-HxCDF	0.0592 J	0.0130	5.00	ng/kg	105		70-156		
1234678-HpCDF	0.142 J	0.0102	5.00	ng/kg	101		82-122		
1234789-HpCDF	0.0456 J	0.0197	5.00	ng/kg	107		78-138		
OCDF	0.165 J	0.0244	10.0	ng/kg	105		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10349162403A	Sample number(s): 6163633-6163635					BKG: P163597			
28a Moisture Content by 160.3						8.6	8.6	0	20
Batch number: 10349162403B	Sample number(s): 6163636-6163654					BKG: P163599			
28a Moisture Content by 160.3						6.3	6.5	2	20
Batch number: 10363001	Sample number(s): 6163633-6163654 UNSPK: 6163636								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225224
Reported: 03/11/11 at 02:47 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2378-TCDD	92	91	67-158	1	25				
12378-PeCDD	94	100	70-142	6	25				
123478-HxCDD	101	103	70-164	2	25				
123678-HxCDD	92	101	76-134	8	25				
123789-HxCDD	96	104	64-162	6	25				
1234678-HpCDD	-76 (2)	216 (2)	70-140	33*	25				
OCDD	-683 (2)	497 (2)	78-144	36*	25				
2378-TCDF	100	96	75-158	4	25				
12378-PeCDF	101	101	80-134	0	25				
23478-PeCDF	100	100	68-160	0	25				
123478-HxCDF	103	107	72-134	4	25				
123678-HxCDF	102	105	84-130	3	25				
123789-HxCDF	108	107	78-130	2	25				
234678-HxCDF	103	108	70-156	4	25				
1234678-HpCDF	61*	128*	82-122	26*	25				
1234789-HpCDF	105	106	78-138	1	25				
OCDF	71	144	63-170	26*	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 10363001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6163633	70	85	80	66	72	71
6163634	65	79	68	72	71	63
6163635	63	83	71	73	69	63
6163636	64	79	69	72	70	67
6163637	71	80	67	75	67	62
6163638	58	73	60	61	59	59
6163639	63	83	65	74	65	59
6163640	70	71	63	69	65	59
6163641	71	84	70	73	70	66
6163642	67	80	71	78	74	75
6163643	78	93	76	78	77	73
6163644	67	79	74	77	71	68
6163645	71	74	74	78	81	71
6163646	79	85	76	77	78	77
6163647	74	81	69	74	66	67
6163648	68	71	58	70	61	53
6163649	70	79	66	75	70	69
6163650	86	96	79	87	82	78
6163651	57	68	59	66	61	59
6163652	70	79	65	78	68	64
6163653	78	87	76	79	75	78
6163654	71	83	72	73	75	77

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225224
Reported: 03/11/11 at 02:47 PM

Surrogate Quality Control

Blank	60	67	56	64	56	54
MS	71	80	67	75	67	62
MSD	58	73	60	61	59	59
OPR	56	59	49	57	51	46
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6163633	64	63	43	80	88	84
6163634	81	63	51	71	90	76
6163635	82	63	55	77	94	76
6163636	86	70	60	76	86	79
6163637	92	62	55	75	89	77
6163638	70	57	51	67	75	64
6163639	90	59	55	80	93	76
6163640	77	60	55	82	79	71
6163641	82	68	60	83	82	72
6163642	79	66	61	73	81	77
6163643	79	74	72	87	95	79
6163644	85	67	62	80	83	78
6163645	79	66	57	81	80	83
6163646	80	71	65	82	83	79
6163647	81	57	50	79	85	71
6163648	75	51	46	81	82	68
6163649	81	64	57	87	88	76
6163650	94	74	67	100	109	88
6163651	76	59	52	65	77	69
6163652	88	59	53	79	88	78
6163653	80	72	69	86	93	82
6163654	75	70	65	82	87	77
Blank	79	50	46	70	73	69
MS	92	62	55	75	89	77
MSD	70	57	51	67	75	64
OPR	77	47	44	67	71	63
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6163633	64	70	66	45	72	80
6163634	72	72	82	63	61	83
6163635	71	71	75	64	58	79
6163636	74	74	84	72	63	81
6163637	75	74	79	70	61	82
6163638	61	62	66	58	56	73
6163639	71	74	76	70	59	86
6163640	75	70	73	71	65	76
6163641	71	71	78	70	65	81
6163642	73	77	72	68	69	81
6163643	75	75	79	73	76	91
6163644	72	71	76	69	70	81
6163645	80	80	80	70	71	81
6163646	74	76	76	71	73	82
6163647	70	73	73	63	71	83
6163648	66	69	71	63	62	78

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225224
Reported: 03/11/11 at 02:47 PM

Surrogate Quality Control

6163649	79	77	79	69	69	85
6163650	87	86	90	81	82	100
6163651	66	69	71	62	54	72
6163652	78	78	78	73	66	86
6163653	78	80	83	77	77	86
6163654	76	78	80	72	77	84
Blank	63	62	68	60	48	70
MS	75	74	79	70	61	82
MSD	61	62	66	58	56	73
OPR	58	58	66	61	45	64
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

	13C12-2378-TCDF-Conf
6163633	
6163634	
6163635	
6163636	
6163637	
6163638	
6163639	
6163640	76
6163641	
6163642	61
6163643	
6163644	
6163645	
6163646	
6163647	
6163648	
6163649	
6163650	
6163651	
6163652	
6163653	
6163654	
Blank	56
MS	
MSD	
OPR	
Limits:	24-169

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1225224 6163633-54

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, laboratory measure pH and ORP

Samplers: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-DRO EPA 8015B Mod.	*Metals EPA 6010/6020B/7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Tetrahenyl EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-006-SA5C-SB-9.0-10.0	12.13.10	0955	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	dup
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	8 x 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	MS sample
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	4 x 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	MS sample
EB-15-SA5B-121310	12.13.10	1215	water	none	6-1 liter amber			X						X	X			X	X										rinsate
EB-15-SA5B-121310	12.13.10	1215	water	none	1-500 ml poly							X	X			X													rinsate
EB-15-SA5B-121310	12.13.10	1215	water	none	HNO3						X																		rinsate
EB-15-SA5B-121310	12.13.10	1215	water	HCl	6-40 mL amber VOA vials	X	X																						rinsate
SL-006-SA5C-SB-4.5MS	12.13.10	0943	soil	none	15 Encore Samplers	X	X		X																				MS sample
SL-006-SA5C-SB-9.5	12.13.10	0953	soil	none	5 Encore Samplers	X	X		X																				
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	5 Encore Samplers	X	X		X																				dup
SL-007-SA5C-SB-9.5	12.13.10	1210	soil	none	5 Encore Samplers	X	X		X																				
SL-007-SA5C-SB-4.0-5.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-007-SA5C-SB-9.0-10.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-075-SA5B-SS-0.0-0.5	12.13.10	0903	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-007-SA5B-SS-0.0-0.5	12.13.10	1004	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-007-SA5B-SS-4.5	12.13.10	1200	soil	none	5 Encore Samplers	X	X		X																				
SL-078-SA5B-SS-0.0-0.5	12.13.10	1110	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-084-SA5B-SS-0.0-0.5	12.13.10	1046	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-076-SA5B-SS-0.0-0.5	12.13.10	0928	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-071-SA5B-SS-0.0-0.5MS	12.13.10	1009	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X	X	X	X										MS sample
SL-139-SA5B-SS-0.0-0.5	12.13.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-083-SA5B-SS-0.0-0.5	12.13.10	1049	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-074-SA5B-SS-0.0-0.5	12.13.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-301-SA5B-SS-0.0-0.5	12.13.10	0900	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-073-SA5B-SS-0.0-0.5	12.13.10	0930	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-072-SA5B-SS-0.0-0.5	12.13.10	0948	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
DUP04-SA5B-QC-121310	12.13.10	1015	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										dup
SED-029-SIV-SD-0.0-0.5	12.13.10	1152	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-031-SIV-SD-0.0-0.5	12.13.10	0920	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-030-SIV-SD-0.0-0.5	12.13.10	1113	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-040-SIV-SD-0.0-0.5	12.13.10	1019	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-086-SA5B-SS-0.0-0.5	12.13.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-092-SA5B-SS-0.0-0.5	12.13.10	1327	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-103-SA5B-SS-0.0-0.5	12.13.10	1425	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-089-SA5B-SS-0.0-0.5	12.13.10	1410	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-236-SA5B-SS-0.0-0.5	12.13.10	1310	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	5 Encore Samplers	X	X		X																				
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar															X	X	X	X	X	X	X			
SL-087-SA5B-SS-0.0-0.5	12.13.10	1317	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-095-SA5B-SS-0.0-0.5	12.13.10	1440	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-091-SA5B-SS-0.0-0.5	12.13.10	1510	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-003-SA5C-SB-4.0-5.0	12.13.10	1437	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-003-SA5C-SB-4.5	12.13.10	1433	soil	none	5 Encore Samplers	X	X		X																				
SL-001-SA5C-SB-4.0-5.0	12.13.10	1608	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-001-SA5C-SB-9.0-10.0	12.13.10	1616	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-001-SA5C-SB-4.5	12.13.10	1604	soil	none	5 Encore Samplers	X	X		X																				
SL-001-SA5C-SB-9.5	12.13.10	1612	soil	none	5 Encore Samplers	X	X		X																				
SED-032-SIV-SD-0.0-0.5	12.13.10	1457	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-033-SIV-SD-0.0-0.5	12.13.10	1540	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Laboratory:
	12/13/10 1630		12/14/10	Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time	Airbill No. 8898898 0007 32992	1005	6 coolers

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

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

Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

January 25, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/14/2010
Group Number: 1225274
SDG: DE037
PO Number: 1203-004-007-AL
Release Number: Tracking #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-006-SA5C-SB-9.0-10.0 Soil	6163869
DUP13-SA5C-QC-121310 Soil	6163870
SL-006-SA5C-SB-4.0-5.0 Soil	6163871
SL-006-SA5C-SB-4.0-5.0MS Soil	6163872
SL-006-SA5C-SB-4.0-5.0MSD Soil	6163873
SL-006-SA5C-SB-4.0-5.0DUP Soil	6163874
EB-15-SA5B-121310 Water	6163875
SL-007-SA5C-SB-4.0-5.0 Soil	6163876
SL-007-SA5C-SB-9.0-10.0 Soil	6163877
SL-075-SA5B-SS-0.0-0.5 Soil	6163878
SL-077-SA5B-SS-0.0-0.5 Soil	6163879
SL-085-SA5B-SS-0.0-0.5 Soil	6163880
SL-087-SA5B-SS-0.0-0.5 Soil	6163881
SL-095-SA5B-SS-0.0-0.5 Soil	6163882
SL-091-SA5B-SS-0.0-0.5 Soil	6163883
SL-003-SA5C-SB-4.0-5.0 Soil	6163884
SL-001-SA5C-SB-4.0-5.0 Soil	6163885
SL-001-SA5C-SB-9.0-10.0 Soil	6163886
SED-032-SIV-SD-0.0-0.5 Soil	6163887
SED-033-SIV-SD-0.0-0.5 Soil	6163888

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

Lancaster Laboratories

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

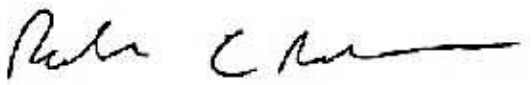
Analysis Report

ELECTRONIC COPY TO CDM Federal Services Program Attn: Todd Burgesser

1 COPY TO Data Package Group

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

Respectfully Submitted,



Robin C. Runkle
Senior Specialist

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.7	J	7.3	8.8		1.01
06192	Benzene	71-43-2	0.11	U	0.11	4.4		1.01
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.4		1.01
06192	Bromochloromethane	74-97-5	0.36	U	0.36	4.4		1.01
06192	Bromodichloromethane	75-27-4	0.09	U	0.09	4.4		1.01
06192	Bromoform	75-25-2	0.44	U	0.44	4.4		1.01
06192	Bromomethane	74-83-9	0.27	U	0.27	4.4		1.01
06192	2-Butanone	78-93-3	1.3	U	1.3	8.8		1.01
06192	n-Butylbenzene	104-51-8	0.13	U	0.13	4.4		1.01
06192	sec-Butylbenzene	135-98-8	0.07	U	0.07	4.4		1.01
06192	tert-Butylbenzene	98-06-6	0.18	U	0.18	4.4		1.01
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.4		1.01
06192	Chlorobenzene	108-90-7	0.12	U	0.12	4.4		1.01
06192	Chloroethane	75-00-3	0.14	U	0.14	4.4		1.01
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.33	U	0.33	4.4		1.01
06192	Chloroform	67-66-3	0.13	U	0.13	4.4		1.01
06192	Chloromethane	74-87-3	0.36	U	0.36	4.4		1.01
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.4		1.01
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.4		1.01
06192	Chlorotrifluoroethene	79-38-9	0.55	U	0.55	5.5		1.01
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.77	U	0.77	4.4		1.01
06192	Dibromochloromethane	124-48-1	0.22	U	0.22	4.4		1.01
06192	1,2-Dibromoethane	106-93-4	0.19	U	0.19	4.4		1.01
06192	Dibromomethane	74-95-3	0.26	U	0.26	4.4		1.01
06192	1,2-Dichlorobenzene	95-50-1	0.1	U	0.1	4.4		1.01
06192	1,3-Dichlorobenzene	541-73-1	0.13	U	0.13	4.4		1.01
06192	1,4-Dichlorobenzene	106-46-7	0.18	U	0.18	4.4		1.01
06192	Dichlorodifluoromethane	75-71-8	0.13	U	0.13	4.4		1.01
06192	1,1-Dichloroethane	75-34-3	0.11	U	0.11	4.4		1.01
06192	1,2-Dichloroethane	107-06-2	0.16	U	0.16	4.4		1.01
06192	1,1-Dichloroethene	75-35-4	0.43	U	0.43	4.4		1.01
06192	cis-1,2-Dichloroethene	156-59-2	0.21	U	0.21	4.4		1.01
06192	trans-1,2-Dichloroethene	156-60-5	0.13	U	0.13	4.4		1.01
06192	1,2-Dichloropropane	78-87-5	0.19	U	0.19	4.4		1.01
06192	1,3-Dichloropropane	142-28-9	0.09	U	0.09	4.4		1.01
06192	2,2-Dichloropropane	594-20-7	0.19	U	0.19	4.4		1.01
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.4		1.01
06192	cis-1,3-Dichloropropene	10061-01-5	0.18	U	0.18	4.4		1.01
06192	trans-1,3-Dichloropropene	10061-02-6	0.19	U	0.19	4.4		1.01
06192	Ethylbenzene	100-41-4	0.07	U	0.07	4.4		1.01
06192	Freon 113	76-13-1	0.12	U	0.12	4.4		1.01
06192	Freon 133a	75-88-7	0.55	U	0.55	5.5		1.01
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.4		1.01
06192	2-Hexanone	591-78-6	1.8	U	1.8	8.8		1.01
06192	Isopropylbenzene	98-82-8	0.07	U	0.07	4.4		1.01
06192	p-Isopropyltoluene	99-87-6	0.12	U	0.12	4.4		1.01
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.23	U	0.23	4.4		1.01
06192	4-Methyl-2-pentanone	108-10-1	0.43	U	0.43	8.8		1.01
06192	Methylene Chloride	75-09-2	1.1	J	0.26	4.4		1.01
06192	n-Propylbenzene	103-65-1	0.08	U	0.08	4.4		1.01

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.11	U	0.11	4.4		1.01
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12	U	0.12	4.4		1.01
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.25	U	0.25	4.4		1.01
06192	Tetrachloroethene	127-18-4	0.22	U	0.22	4.4		1.01
06192	Toluene	108-88-3	0.09	U	0.09	4.4		1.01
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.4		1.01
06192	1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	4.4		1.01
06192	1,1,1-Trichloroethane	71-55-6	0.22	U	0.22	4.4		1.01
06192	1,1,2-Trichloroethane	79-00-5	0.30	U	0.30	4.4		1.01
06192	Trichloroethene	79-01-6	0.16	U	0.16	4.4		1.01
06192	Trichlorofluoromethane	75-69-4	0.32	U	0.32	4.4		1.01
06192	1,2,3-Trichloropropane	96-18-4	0.36	U	0.36	4.4		1.01
06192	1,2,4-Trimethylbenzene	95-63-6	0.44	U	0.44	4.4		1.01
06192	1,3,5-Trimethylbenzene	108-67-8	0.11	U	0.11	4.4		1.01
06192	Vinyl Chloride	75-01-4	0.22	U	0.22	4.4		1.01
06192	m+p-Xylene	179601-23-1	0.19	U	0.19	4.4		1.01
06192	o-Xylene	95-47-6	0.19	U	0.19	4.4		1.01
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.5	U	5.5	17		25.41
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	78.4		36.3	72.6		2
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	540		1
04688	Benzyl alcohol	100-51-6	180	U	180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540		1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	360		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	540		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	20		1
10138	Chrysene	218-01-9	0.36	U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20		1
10138	Fluoranthene	206-44-0	0.73	U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U	0.73	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20		1
10138	Phenanthrene	85-01-8	0.73	U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73	U	0.73	1.8		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.0		22.98
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	82	U	82	160	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	54	U	54	160	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	330	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	330	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	54	U	54	160	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	54	U	54	160	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	54	U	54	160	10000000	1
10132	HMX	2691-41-0	140	U	140	410	10000000	1
10132	Nitrobenzene	98-95-3	54	U	54	160	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,300	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	160	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U	140	160	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	160	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,300	10000000	1
10132	RDX	121-82-4	68	U	68	160	10000000	1
10132	Tetryl	479-45-8	83	U	83	160	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	54	U	54	160	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	54	U	54	160	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	990	J	650	1,600		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.9		1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.9		1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.36	U	0.36	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	540		1
10501	Isopropanol	67-63-0	110	U	110	540		1
10501	Methanol	67-56-1	110	U	110	540		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.6	U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6	U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6	U	1.6	3.8		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,200		5.32	21.2		1
07914	Boron	7440-42-8	4.83	J	0.941	5.29		1
01650	Calcium	7440-70-2	2,620		6.48	21.2		1
01654	Iron	7439-89-6	18,500		4.98	21.2		1
01656	Lithium	7439-93-2	17.9		0.23	2.1		1
01657	Magnesium	7439-95-4	3,420		2.69	10.6		1
06958	Manganese	7439-96-5	233		0.0825	0.529		1
10145	Phosphorus	7723-14-0	318		0.592	10.6		1
01662	Potassium	7440-09-7	2,590		19.0	52.9		1
01667	Sodium	7440-23-5	148		39.4	106		1
07968	Strontium	7440-24-6	19.8		0.0656	0.529		1
06969	Tin	7440-31-5	2.43	J	1.06	10.6		1
06970	Titanium	7440-32-6	1,100		0.804	2.12		2
10146	Zirconium	7440-67-7	1.68	J	0.888	5.29		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.296		0.0647	0.216		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	11.4		0.0647	0.431		2
06126	Barium	7440-39-3	106		0.116	0.431		2
06127	Beryllium	7440-41-7	1.30		0.0173	0.108		2
06128	Cadmium	7440-43-9	0.248		0.0388	0.108		2
06131	Chromium	7440-47-3	50.1		0.129	0.431		2
06132	Cobalt	7440-48-4	11.1		0.0216	0.108		2
06133	Copper	7440-50-8	19.7		0.0712	0.431		2
06135	Lead	7439-92-1	13.0		0.0112	0.216		2
06138	Molybdenum	7439-98-7	0.790		0.0539	0.108		2
06139	Nickel	7440-02-0	26.9		0.108	0.431		2
06141	Selenium	7782-49-2	0.241	J	0.0431	0.431		2
06142	Silver	7440-22-4	0.0704	J	0.0129	0.108		2
06145	Thallium	7440-28-0	0.497		0.0324	0.108		2
06148	Vanadium	7440-62-2	93.3		0.0237	0.108		2
06149	Zinc	7440-66-6	114		0.604	3.24		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0030	U	0.0030	0.104		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.7		0.87	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.9		0.87	1.6		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.7		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.26	J	0.22	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.54		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	379		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.64		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	8.2		0.50	0.50		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0691 SDG#: DE037-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-006-SA5C-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 03:57	Laura M Krieger	1.01
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 03:07	Sara E Johnson	25.41
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 16:54	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:42	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 16:52	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/05/2011 15:55	Timothy J Trees	2
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 01:49	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/29/2010 21:38	Chad A Moline	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 15:54	Marie D John	22.98
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:57	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 00:22	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 22:49	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 02:29	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0691 SDG#: DE037-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103500005A	12/17/2010 18:20	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 13:17	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103500005A	12/16/2010 14:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 02:52	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:15	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/24/2010 10:32	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:32	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:42	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:42	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:42	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:44	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 14:45	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 14:45	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 02:19	Venia B McFadden	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.5-5.0

LLI Sample # SW 6163869
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0691 SDG#: DE037-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/03/2011 22:03	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102201A	12/27/2010 18:45	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102201A	12/27/2010 08:55	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.4	U	8.4	10		1.1
06192	Benzene	71-43-2	0.13	U	0.13	5.1		1.1
06192	Bromobenzene	108-86-1	0.16	U	0.16	5.1		1.1
06192	Bromochloromethane	74-97-5	0.42	U	0.42	5.1		1.1
06192	Bromodichloromethane	75-27-4	0.10	U	0.10	5.1		1.1
06192	Bromoform	75-25-2	0.51	U	0.51	5.1		1.1
06192	Bromomethane	74-83-9	0.32	U	0.32	5.1		1.1
06192	2-Butanone	78-93-3	1.5	U	1.5	10		1.1
06192	n-Butylbenzene	104-51-8	0.15	U	0.15	5.1		1.1
06192	sec-Butylbenzene	135-98-8	0.08	U	0.08	5.1		1.1
06192	tert-Butylbenzene	98-06-6	0.20	U	0.20	5.1		1.1
06192	Carbon Tetrachloride	56-23-5	0.18	U	0.18	5.1		1.1
06192	Chlorobenzene	108-90-7	0.14	U	0.14	5.1		1.1
06192	Chloroethane	75-00-3	0.16	U	0.16	5.1		1.1
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.38	U	0.38	5.1		1.1
06192	Chloroform	67-66-3	0.15	U	0.15	5.1		1.1
06192	Chloromethane	74-87-3	0.42	U	0.42	5.1		1.1
06192	2-Chlorotoluene	95-49-8	0.18	U	0.18	5.1		1.1
06192	4-Chlorotoluene	106-43-4	0.18	U	0.18	5.1		1.1
06192	Chlorotrifluoroethene	79-38-9	0.63	U	0.63	6.3		1.1
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.88	U	0.88	5.1		1.1
06192	Dibromochloromethane	124-48-1	0.25	U	0.25	5.1		1.1
06192	1,2-Dibromoethane	106-93-4	0.21	U	0.21	5.1		1.1
06192	Dibromomethane	74-95-3	0.30	U	0.30	5.1		1.1
06192	1,2-Dichlorobenzene	95-50-1	0.11	U	0.11	5.1		1.1
06192	1,3-Dichlorobenzene	541-73-1	0.15	U	0.15	5.1		1.1
06192	1,4-Dichlorobenzene	106-46-7	0.20	U	0.20	5.1		1.1
06192	Dichlorodifluoromethane	75-71-8	0.15	U	0.15	5.1		1.1
06192	1,1-Dichloroethane	75-34-3	0.13	U	0.13	5.1		1.1
06192	1,2-Dichloroethane	107-06-2	0.19	U	0.19	5.1		1.1
06192	1,1-Dichloroethene	75-35-4	0.49	U	0.49	5.1		1.1
06192	cis-1,2-Dichloroethene	156-59-2	0.24	U	0.24	5.1		1.1
06192	trans-1,2-Dichloroethene	156-60-5	0.15	U	0.15	5.1		1.1
06192	1,2-Dichloropropane	78-87-5	0.21	U	0.21	5.1		1.1
06192	1,3-Dichloropropane	142-28-9	0.10	U	0.10	5.1		1.1
06192	2,2-Dichloropropane	594-20-7	0.21	U	0.21	5.1		1.1
06192	1,1-Dichloropropene	563-58-6	0.16	U	0.16	5.1		1.1
06192	cis-1,3-Dichloropropene	10061-01-5	0.20	U	0.20	5.1		1.1
06192	trans-1,3-Dichloropropene	10061-02-6	0.21	U	0.21	5.1		1.1
06192	Ethylbenzene	100-41-4	0.08	U	0.08	5.1		1.1
06192	Freon 113	76-13-1	0.14	U	0.14	5.1		1.1
06192	Freon 133a	75-88-7	0.63	U	0.63	6.3		1.1
06192	Hexachlorobutadiene	87-68-3	0.18	U	0.18	5.1		1.1
06192	2-Hexanone	591-78-6	2.0	U	2.0	10		1.1
06192	Isopropylbenzene	98-82-8	0.08	U	0.08	5.1		1.1
06192	p-Isopropyltoluene	99-87-6	0.14	U	0.14	5.1		1.1
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.26	U	0.26	5.1		1.1
06192	4-Methyl-2-pentanone	108-10-1	0.49	U	0.49	10		1.1
06192	Methylene Chloride	75-09-2	0.97	J	0.30	5.1		1.1
06192	n-Propylbenzene	103-65-1	0.09	U	0.09	5.1		1.1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.13	U	0.13	5.1		1.1
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.14	U	0.14	5.1		1.1
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.29	U	0.29	5.1		1.1
06192	Tetrachloroethene	127-18-4	0.25	U	0.25	5.1		1.1
06192	Toluene	108-88-3	0.10	U	0.10	5.1		1.1
06192	1,2,3-Trichlorobenzene	87-61-6	0.18	U	0.18	5.1		1.1
06192	1,2,4-Trichlorobenzene	120-82-1	0.23	U	0.23	5.1		1.1
06192	1,1,1-Trichloroethane	71-55-6	0.25	U	0.25	5.1		1.1
06192	1,1,2-Trichloroethane	79-00-5	0.34	U	0.34	5.1		1.1
06192	Trichloroethene	79-01-6	0.19	U	0.19	5.1		1.1
06192	Trichlorofluoromethane	75-69-4	0.37	U	0.37	5.1		1.1
06192	1,2,3-Trichloropropane	96-18-4	0.42	U	0.42	5.1		1.1
06192	1,2,4-Trimethylbenzene	95-63-6	0.51	U	0.51	5.1		1.1
06192	1,3,5-Trimethylbenzene	108-67-8	0.13	U	0.13	5.1		1.1
06192	Vinyl Chloride	75-01-4	0.25	U	0.25	5.1		1.1
06192	m+p-Xylene	179601-23-1	0.21	U	0.21	5.1		1.1
06192	o-Xylene	95-47-6	0.21	U	0.21	5.1		1.1
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.3	U	5.3	16		23.28
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	129		19.1	38.2		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	76	U	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	760	U	760	2,300		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	76	U	76	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.76	U	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21		1
10138	Chrysene	218-01-9	0.38	U	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	6.9	21		1
10138	Fluoranthene	206-44-0	0.76	U	0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U	0.76	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76	U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21		1
10138	Phenanthrene	85-01-8	0.76	U	0.76	1.9		1
10138	Pyrene	129-00-0	0.76	U	0.76	1.9		1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.								
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.0		22.64
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	86	U	86	170	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	57	U	57	170	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	340	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	340	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	57	U	57	170	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	57	U	57	170	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	57	U	57	170	10000000	1
10132	HMX	2691-41-0	140	U	140	430	10000000	1
10132	Nitrobenzene	98-95-3	57	U	57	170	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,400	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	170	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U	140	170	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	170	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,400	10000000	1
10132	RDX	121-82-4	72	U	72	170	10000000	1
10132	Tetryl	479-45-8	88	U	88	170	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	57	U	57	170	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	2,4,6-Trinitrotoluene	118-96-7	57	U	57	170	10000000	1
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	690	U	690	1,700		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.57	U	0.57	1.9		1
10225	PCB-1232	11141-16-5	0.60	U	0.60	1.9		1
10225	PCB-1242	53469-21-9	0.57	U	0.57	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.44	J	0.38	1.9		1
10225	PCB-1260	11096-82-5	0.38	U	0.38	1.9		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	570		1
10501	Isopropanol	67-63-0	110	U	110	570		1
10501	Methanol	67-56-1	110	U	110	570		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,300		5.66	22.5		1
07914	Boron	7440-42-8	5.54	J	1.00	5.62		1
01650	Calcium	7440-70-2	7,160		6.89	22.5		1
01654	Iron	7439-89-6	33,600		10.6	45.0		2
01656	Lithium	7439-93-2	29.5		0.25	2.2		1
01657	Magnesium	7439-95-4	7,170		2.86	11.2		1
06958	Manganese	7439-96-5	332		0.0877	0.562		1
10145	Phosphorus	7723-14-0	397		0.630	11.2		1
01662	Potassium	7440-09-7	3,800		20.2	56.2		1
01667	Sodium	7440-23-5	189		41.9	112		1
07968	Strontium	7440-24-6	33.9		0.0697	0.562		1
06969	Tin	7440-31-5	2.94	J	1.12	11.2		1
06970	Titanium	7440-32-6	1,560		0.854	2.25		2
10146	Zirconium	7440-67-7	4.82	J	0.944	5.62		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.214 J	0.0681	0.227		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.66	0.0681	0.454		2
06126	Barium	7440-39-3	123	0.123	0.454		2
06127	Beryllium	7440-41-7	0.962	0.0182	0.114		2
06128	Cadmium	7440-43-9	0.102 J	0.0409	0.114		2
06131	Chromium	7440-47-3	43.1	0.136	0.454		2
06132	Cobalt	7440-48-4	9.56	0.0227	0.114		2
06133	Copper	7440-50-8	12.3	0.0749	0.454		2
06135	Lead	7439-92-1	9.46	0.0118	0.227		2
06138	Molybdenum	7439-98-7	0.419	0.0568	0.114		2
06139	Nickel	7440-02-0	19.0	0.114	0.454		2
06141	Selenium	7782-49-2	0.340 J	0.0454	0.454		2
06142	Silver	7440-22-4	0.0310 J	0.0136	0.114		2
06145	Thallium	7440-28-0	0.392	0.0341	0.114		2
06148	Vanadium	7440-62-2	89.1	0.0250	0.114		2
06149	Zinc	7440-66-6	91.3	0.636	3.41		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.110		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.6	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	16.8	0.92	1.7		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.4		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.28 J	0.23	1.1		1
	SW-846 9012B		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.21 U	0.21	0.58		1
	ASTM D1498		**mV**	**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	400	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.05	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

DUP13 SDG#: DE037-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	12.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 04:19	Laura M Krieger	1.1
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 03:27	Sara E Johnson	23.28
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 16:40	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 16:38	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/05/2011 12:48	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 02:15	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/29/2010 22:11	Chad A Moline	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 16:30	Marie D John	22.64
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:59	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 01:05	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 22:59	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 02:48	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

DUP13 SDG#: DE037-02FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103500005A	12/17/2010 18:34	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 11:47	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103500005A	12/16/2010 14:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/22/2010 02:56	Tara L Snyder	2
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 02:56	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:26	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:45	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:34	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:45	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:45	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:45	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:45	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 14:59	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 14:59	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 02:44	Venia B McFadden	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163870
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

DUP13 SDG#: DE037-02FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/03/2011 22:19	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:14	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.1	U	7.1	8.5		0.95
06192	Benzene	71-43-2	0.11	U	0.11	4.3		0.95
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.3		0.95
06192	Bromochloromethane	74-97-5	0.35	U	0.35	4.3		0.95
06192	Bromodichloromethane	75-27-4	0.09	U	0.09	4.3		0.95
06192	Bromoform	75-25-2	0.43	U	0.43	4.3		0.95
06192	Bromomethane	74-83-9	0.27	U	0.27	4.3		0.95
06192	2-Butanone	78-93-3	1.3	U	1.3	8.5		0.95
06192	n-Butylbenzene	104-51-8	0.13	U	0.13	4.3		0.95
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.3		0.95
06192	tert-Butylbenzene	98-06-6	0.17	U	0.17	4.3		0.95
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.3		0.95
06192	Chlorobenzene	108-90-7	0.12	U	0.12	4.3		0.95
06192	Chloroethane	75-00-3	0.14	U	0.14	4.3		0.95
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.32	U	0.32	4.3		0.95
06192	Chloroform	67-66-3	0.13	U	0.13	4.3		0.95
06192	Chloromethane	74-87-3	0.35	U	0.35	4.3		0.95
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.3		0.95
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.3		0.95
06192	Chlorotrifluoroethene	79-38-9	0.53	U	0.53	5.3		0.95
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.75	U	0.75	4.3		0.95
06192	Dibromochloromethane	124-48-1	0.21	U	0.21	4.3		0.95
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.3		0.95
06192	Dibromomethane	74-95-3	0.26	U	0.26	4.3		0.95
06192	1,2-Dichlorobenzene	95-50-1	0.1	U	0.1	4.3		0.95
06192	1,3-Dichlorobenzene	541-73-1	0.13	U	0.13	4.3		0.95
06192	1,4-Dichlorobenzene	106-46-7	0.17	U	0.17	4.3		0.95
06192	Dichlorodifluoromethane	75-71-8	0.13	U	0.13	4.3		0.95
06192	1,1-Dichloroethane	75-34-3	0.11	U	0.11	4.3		0.95
06192	1,2-Dichloroethane	107-06-2	0.16	U	0.16	4.3		0.95
06192	1,1-Dichloroethene	75-35-4	0.42	U	0.42	4.3		0.95
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.3		0.95
06192	trans-1,2-Dichloroethene	156-60-5	0.13	U	0.13	4.3		0.95
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.3		0.95
06192	1,3-Dichloropropane	142-28-9	0.09	U	0.09	4.3		0.95
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.3		0.95
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.3		0.95
06192	cis-1,3-Dichloropropene	10061-01-5	0.17	U	0.17	4.3		0.95
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.3		0.95
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.3		0.95
06192	Freon 113	76-13-1	0.12	U	0.12	4.3		0.95
06192	Freon 133a	75-88-7	0.53	U	0.53	5.3		0.95
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.3		0.95
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.5		0.95
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.3		0.95
06192	p-Isopropyltoluene	99-87-6	0.12	U	0.12	4.3		0.95
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22	U	0.22	4.3		0.95
06192	4-Methyl-2-pentanone	108-10-1	0.42	U	0.42	8.5		0.95
06192	Methylene Chloride	75-09-2	0.63	J	0.26	4.3		0.95
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.3		0.95

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.11	U	0.11	4.3		0.95
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12	U	0.12	4.3		0.95
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24	U	0.24	4.3		0.95
06192	Tetrachloroethene	127-18-4	0.21	U	0.21	4.3		0.95
06192	Toluene	108-88-3	0.09	U	0.09	4.3		0.95
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.3		0.95
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.3		0.95
06192	1,1,1-Trichloroethane	71-55-6	0.21	U	0.21	4.3		0.95
06192	1,1,2-Trichloroethane	79-00-5	0.29	U	0.29	4.3		0.95
06192	Trichloroethene	79-01-6	0.16	U	0.16	4.3		0.95
06192	Trichlorofluoromethane	75-69-4	0.31	U	0.31	4.3		0.95
06192	1,2,3-Trichloropropane	96-18-4	0.35	U	0.35	4.3		0.95
06192	1,2,4-Trimethylbenzene	95-63-6	0.43	U	0.43	4.3		0.95
06192	1,3,5-Trimethylbenzene	108-67-8	0.11	U	0.11	4.3		0.95
06192	Vinyl Chloride	75-01-4	0.21	U	0.21	4.3		0.95
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.3		0.95
06192	o-Xylene	95-47-6	0.18	U	0.18	4.3		0.95
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.4	U	4.4	13		19.56
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	18.8	U	18.8	37.6		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	560		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	560		1
04688	Benzyl alcohol	100-51-6	190	U	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	75	U	75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560		1
04688	2,4-Dinitrophenol	51-28-5	750	U	750	2,300		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	75	U	75	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	560		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The following compounds were detected in the method blank at the respective concentrations of: diethylphthalate 28 ug/kg bis(2-ethylhexyl)phthalate 18 ug/kg These blank values were not subtracted from the analytical results.							
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75	U	0.75	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.75	U	0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.75	U	0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.75	U	0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U	0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U	0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.8	U	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	6.8	U	6.8	20		1
10138	Chrysene	218-01-9	0.46	J	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U	0.75	1.9		1
10138	Diethylphthalate	84-66-2	6.8	U	6.8	20		1
10138	Dimethylphthalate	131-11-3	6.8	U	6.8	20		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.0	J	6.8	20		1
10138	Fluoranthene	206-44-0	0.75	U	0.75	1.9		1
10138	Fluorene	86-73-7	0.75	U	0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	U	0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.75	U	0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.75	U	0.75	1.9		1
10138	Naphthalene	91-20-3	0.75	U	0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U	0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.8	U	6.8	20		1
10138	Phenanthrene	85-01-8	0.75	U	0.75	1.9		1
10138	Pyrene	129-00-0	0.75	U	0.75	1.9		1
Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.								
GC Volatiles	**TPH GRO SW-846 8015B mod**		mg/kg		mg/kg	mg/kg	mg/kg	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.0		22.73
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	85	U	85	170	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	56	U	56	170	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	340	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	340	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	56	U	56	170	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	56	U	56	170	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	56	U	56	170	10000000	1
10132	HMX	2691-41-0	140	U	140	420	10000000	1
10132	Nitrobenzene	98-95-3	56	U	56	170	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,400	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	170	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U	140	170	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	170	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,400	10000000	1
10132	RDX	121-82-4	71	U	71	170	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	Tetryl	479-45-8	86	U	86	170	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	56	U	56	170	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	56	U	56	170	10000000	1
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	680	U	680	1,700		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9		1
10225	PCB-1232	11141-16-5	0.59	U	0.59	1.9		1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.97	J	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.37	U	0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	560		1
10501	Isopropanol	67-63-0	110	U	110	560		1
10501	Methanol	67-56-1	110	U	110	560		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,700		5.46	21.7		1
07914	Boron	7440-42-8	7.11		0.966	5.43		1
01650	Calcium	7440-70-2	7,330		6.65	21.7		1
01654	Iron	7439-89-6	29,600		10.2	43.4		2
01656	Lithium	7439-93-2	29.0		0.24	2.2		1
01657	Magnesium	7439-95-4	7,030		2.76	10.9		1
06958	Manganese	7439-96-5	387		0.0847	0.543		1
10145	Phosphorus	7723-14-0	419		0.608	10.9		1
01662	Potassium	7440-09-7	3,630		19.5	54.3		1
01667	Sodium	7440-23-5	198		40.5	109		1
07968	Strontium	7440-24-6	32.2		0.0673	0.543		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06969	Tin	7440-31-5	2.29	J	1.09	10.9		1
06970	Titanium	7440-32-6	1,230		0.825	2.17		2
10146	Zirconium	7440-67-7	3.82	J	0.912	5.43		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.272		0.0670	0.223		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.87		0.0670	0.447		2
06126	Barium	7440-39-3	128		0.121	0.447		2
06127	Beryllium	7440-41-7	0.957		0.0179	0.112		2
06128	Cadmium	7440-43-9	0.108	J	0.0402	0.112		2
06131	Chromium	7440-47-3	38.2		0.134	0.447		2
06132	Cobalt	7440-48-4	9.01		0.0223	0.112		2
06133	Copper	7440-50-8	12.0		0.0738	0.447		2
06135	Lead	7439-92-1	9.45		0.0116	0.223		2
06138	Molybdenum	7439-98-7	0.517		0.0559	0.112		2
06139	Nickel	7440-02-0	17.0		0.112	0.447		2
06141	Selenium	7782-49-2	0.299	J	0.0447	0.447		2
06142	Silver	7440-22-4	0.0341	J	0.0134	0.112		2
06145	Thallium	7440-28-0	0.361		0.0335	0.112		2
06148	Vanadium	7440-62-2	76.5		0.0246	0.112		2
06149	Zinc	7440-66-6	81.2		0.626	3.35		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032	U	0.0032	0.112		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.3		0.90	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	13.0		0.90	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2	U	10.2	33.9		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.26	J	0.23	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.55		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	399		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.16	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-006-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 04:41	Laura M Krieger	0.95
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 03:46	Sara E Johnson	19.56
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 16:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:42	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 16:49	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	12/30/2010 21:03	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 00:33	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/29/2010 19:56	Chad A Moline	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 17:07	Marie D John	22.73
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:58	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 01:47	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 23:08	James H Place	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 03:06	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 21:53	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 06:33	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/22/2010 02:31	Tara L Snyder	2
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 02:31	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 19:52	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:24	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:25	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:24	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:24	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:24	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:46	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163871
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 14:02	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 14:02	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 01:07	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/03/2011 22:35	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102201A	12/27/2010 18:47	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102201A	12/27/2010 08:55	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	270	7.1	8.5		0.95
06192	Benzene	71-43-2	21	0.11	4.3		0.95
06192	Bromobenzene	108-86-1	19	0.14	4.3		0.95
06192	Bromochloromethane	74-97-5	21	0.35	4.3		0.95
06192	Bromodichloromethane	75-27-4	21	0.09	4.3		0.95
06192	Bromoform	75-25-2	18	0.43	4.3		0.95
06192	Bromomethane	74-83-9	15	0.27	4.3		0.95
06192	2-Butanone	78-93-3	180	1.3	8.5		0.95
06192	n-Butylbenzene	104-51-8	17	0.13	4.3		0.95
06192	sec-Butylbenzene	135-98-8	18	0.06	4.3		0.95
06192	tert-Butylbenzene	98-06-6	19	0.17	4.3		0.95
06192	Carbon Tetrachloride	56-23-5	22	0.15	4.3		0.95
06192	Chlorobenzene	108-90-7	20	0.12	4.3		0.95
06192	Chloroethane	75-00-3	17	0.14	4.3		0.95
06192	2-Chloroethyl Vinyl Ether	110-75-8	18	0.32	4.3		0.95
06192	Chloroform	67-66-3	22	0.13	4.3		0.95
06192	Chloromethane	74-87-3	16	0.35	4.3		0.95
06192	2-Chlorotoluene	95-49-8	19	0.15	4.3		0.95
06192	4-Chlorotoluene	106-43-4	19	0.15	4.3		0.95
06192	Chlorotrifluoroethene	79-38-9	21	0.51	5.1		0.91
06192	1,2-Dibromo-3-chloropropane	96-12-8	17	0.75	4.3		0.95
06192	Dibromochloromethane	124-48-1	20	0.21	4.3		0.95
06192	1,2-Dibromoethane	106-93-4	19	0.18	4.3		0.95
06192	Dibromomethane	74-95-3	20	0.26	4.3		0.95
06192	1,2-Dichlorobenzene	95-50-1	18	0.1	4.3		0.95
06192	1,3-Dichlorobenzene	541-73-1	17	0.13	4.3		0.95
06192	1,4-Dichlorobenzene	106-46-7	17	0.17	4.3		0.95
06192	Dichlorodifluoromethane	75-71-8	11	0.13	4.3		0.95
06192	1,1-Dichloroethane	75-34-3	22	0.11	4.3		0.95
06192	1,2-Dichloroethane	107-06-2	21	0.16	4.3		0.95
06192	1,1-Dichloroethene	75-35-4	22	0.42	4.3		0.95
06192	cis-1,2-Dichloroethene	156-59-2	21	0.20	4.3		0.95
06192	trans-1,2-Dichloroethene	156-60-5	21	0.13	4.3		0.95
06192	1,2-Dichloropropane	78-87-5	21	0.18	4.3		0.95
06192	1,3-Dichloropropane	142-28-9	20	0.09	4.3		0.95
06192	2,2-Dichloropropane	594-20-7	21	0.18	4.3		0.95
06192	1,1-Dichloropropene	563-58-6	21	0.14	4.3		0.95
06192	cis-1,3-Dichloropropene	10061-01-5	18	0.17	4.3		0.95
06192	trans-1,3-Dichloropropene	10061-02-6	19	0.18	4.3		0.95
06192	Ethylbenzene	100-41-4	20	0.06	4.3		0.95
06192	Freon 113	76-13-1	22	0.12	4.3		0.95
06192	Freon 133a	75-88-7	19	0.51	5.1		0.91
06192	Hexachlorobutadiene	87-68-3	14	0.15	4.3		0.95
06192	2-Hexanone	591-78-6	81	1.7	8.5		0.95
06192	Isopropylbenzene	98-82-8	19	0.06	4.3		0.95
06192	p-Isopropyltoluene	99-87-6	18	0.12	4.3		0.95
06192	Methyl Tertiary Butyl Ether	1634-04-4	19	0.22	4.3		0.95
06192	4-Methyl-2-pentanone	108-10-1	70	0.42	8.5		0.95
06192	Methylene Chloride	75-09-2	22	0.26	4.3		0.95
06192	n-Propylbenzene	103-65-1	20	0.07	4.3		0.95

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	19		0.11	4.3		0.95
06192	1,1,1,2-Tetrachloroethane	630-20-6	21		0.12	4.3		0.95
06192	1,1,2,2-Tetrachloroethane	79-34-5	19		0.24	4.3		0.95
06192	Tetrachloroethene	127-18-4	20		0.21	4.3		0.95
06192	Toluene	108-88-3	21		0.09	4.3		0.95
06192	1,2,3-Trichlorobenzene	87-61-6	13		0.15	4.3		0.95
06192	1,2,4-Trichlorobenzene	120-82-1	13		0.19	4.3		0.95
06192	1,1,1-Trichloroethane	71-55-6	22		0.21	4.3		0.95
06192	1,1,2-Trichloroethane	79-00-5	20		0.29	4.3		0.95
06192	Trichloroethene	79-01-6	20		0.16	4.3		0.95
06192	Trichlorofluoromethane	75-69-4	19		0.31	4.3		0.95
06192	1,2,3-Trichloropropane	96-18-4	19		0.35	4.3		0.95
06192	1,2,4-Trimethylbenzene	95-63-6	19		0.43	4.3		0.95
06192	1,3,5-Trimethylbenzene	108-67-8	19		0.11	4.3		0.95
06192	Vinyl Chloride	75-01-4	17		0.21	4.3		0.95
06192	m+p-Xylene	179601-23-1	40		0.18	4.3		0.95
06192	o-Xylene	95-47-6	19		0.18	4.3		0.95
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	130		5.0	15		22.32
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	711		18.8	37.6		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Acenaphthene	83-32-9	1,800		19	190		1
04688	Acenaphthylene	208-96-8	1,800		19	190		1
04688	Aniline	62-53-3	1,100		190	560		1
04688	Anthracene	120-12-7	1,800		19	190		1
04688	Benzidine	92-87-5	3,500	J	1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,800		19	190		1
04688	Benzo(a)pyrene	50-32-8	1,600		19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,700		19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,500		19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,700		19	190		1
04688	Benzoic acid	65-85-0	1,200		190	560		1
04688	Benzyl alcohol	100-51-6	1,800		190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	1,700		19	190		1
04688	Butylbenzylphthalate	85-68-7	2,000		19	190		1
04688	Di-n-butylphthalate	84-74-2	1,900		19	190		1
04688	Carbazole	86-74-8	1,800		19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	1,800		38	190		1
04688	4-Chloroaniline	106-47-8	810		75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,800		19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,800		19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,800		19	190		1
04688	2-Chloronaphthalene	91-58-7	1,800		19	190		1
04688	2-Chlorophenol	95-57-8	1,800		19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,800		38	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Chrysene	218-01-9	1,800		19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,600		19	190		1
04688	Dibenzofuran	132-64-9	1,800		19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,700		19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,600		19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,600		19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	690		110	380		1
04688	2,4-Dichlorophenol	120-83-2	1,900		19	190		1
04688	Diethylphthalate	84-66-2	1,900		19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,900		38	190		1
04688	3,5-Dimethylphenol	108-68-9	1,900		38	190		1
04688	Dimethylphthalate	131-11-3	1,800		19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,500		190	560		1
04688	2,4-Dinitrophenol	51-28-5	2,000	J	750	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	1,800		38	190		1
04688	2,6-Dinitrotoluene	606-20-2	1,800		19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	1,900		19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000		19	380		1
04688	Fluoranthene	206-44-0	1,800		19	190		1
04688	Fluorene	86-73-7	1,800		19	190		1
04688	Hexachlorobenzene	118-74-1	1,700		19	190		1
04688	Hexachlorobutadiene	87-68-3	1,500		75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	2,700		190	560		1
04688	Hexachloroethane	67-72-1	1,600		19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600		19	190		1
04688	Isophorone	78-59-1	1,800		19	190		1
04688	1-Methylnaphthalene	90-12-0	1,800		19	190		1
04688	2-Methylnaphthalene	91-57-6	1,600		19	190		1
04688	2-Methylphenol	95-48-7	1,900		38	190		1
04688	4-Methylphenol	106-44-5	1,800		38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	Naphthalene	91-20-3	1,700		19	190		1
04688	2-Nitroaniline	88-74-4	1,800		19	190		1
04688	3-Nitroaniline	99-09-2	1,700		38	190		1
04688	4-Nitroaniline	100-01-6	1,400		75	190		1
04688	Nitrobenzene	98-95-3	1,700		19	190		1
04688	2-Nitrophenol	88-75-5	1,700		19	190		1
04688	4-Nitrophenol	100-02-7	1,700		190	560		1
04688	N-Nitrosodimethylamine	62-75-9	1,800		38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800		19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,800		19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	2,000		19	190		1
04688	Pentachlorophenol	87-86-5	1,300		190	560		1
04688	Phenanthrene	85-01-8	1,800		19	190		1
04688	Phenol	108-95-2	1,800		19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
04688	Pyrene	129-00-0	1,900	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,600	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	1,700	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	1,800	38	190		1
	The following compounds were detected in the method blank at the respective concentrations of: diethylphthalate 28 ug/kg bis(2-ethylhexyl)phthalate 18 ug/kg These blank values were not subtracted from the analytical results.						
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	32	0.75	1.9		1
10138	Acenaphthylene	208-96-8	34	0.38	1.9		1
10138	Anthracene	120-12-7	35	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	34	0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	33	0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	38	0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	18	0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	35	0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	39	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	39	6.8	20		1
10138	Chrysene	218-01-9	34	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	21	0.75	1.9		1
10138	Diethylphthalate	84-66-2	40	6.8	20		1
10138	Dimethylphthalate	131-11-3	36	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	43	6.8	20		1
10138	Fluoranthene	206-44-0	38	0.75	1.9		1
10138	Fluorene	86-73-7	34	0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	20	0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	32	0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	30	0.75	1.9		1
10138	Naphthalene	91-20-3	31	0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	30	0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	43	6.8	20		1
10138	Phenanthrene	85-01-8	32	0.75	1.9		1
10138	Pyrene	129-00-0	32	0.75	1.9		1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.						
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	7.9	0.2	1.1		24.65
Explosives	**SW-846 8330A**		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	3,000	85	170	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	3,000	56	170	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	340	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	340	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	2,900		56	170	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	2,800		56	170	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	3,000		56	170	10000000	1
10132	HMX	2691-41-0	2,300		140	420	10000000	1
10132	Nitrobenzene	98-95-3	2,800		56	170	10000000	1
10132	Nitroglycerin	55-63-0	63,000		1,100	3,400	10000000	1
10132	2-Nitrotoluene	88-72-2	3,000		110	170	10000000	1
10132	3-Nitrotoluene	99-08-1	3,000		140	170	10000000	1
10132	4-Nitrotoluene	99-99-0	3,000		110	170	10000000	1
10132	PETN	78-11-5	73,000		1,100	3,400	10000000	1
10132	RDX	121-82-4	2,700		71	170	10000000	1
10132	Tetryl	479-45-8	3,700		86	170	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	3,300		56	170	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	3,000		56	170	10000000	1
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	5,500		680	1,700		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7		1
10225	PCB-1016	12674-11-2	19		0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9		1
10225	PCB-1232	11141-16-5	0.59	U	0.59	1.9		1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9		1
10225	PCB-1254	11097-69-1	6.6		0.37	1.9		1
10225	PCB-1260	11096-82-5	21		0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.								
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	2,300		110	560		1
10501	Isopropanol	67-63-0	2,400		110	560		1
10501	Methanol	67-56-1	2,100		110	560		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	J	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	J	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.8	J	1.7	4.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	26,900		5.62	22.3		1
07914	Boron	7440-42-8	217		0.995	5.59		1
01650	Calcium	7440-70-2	6,690		6.85	22.3		1
01654	Iron	7439-89-6	30,100		5.26	22.3		1
01656	Lithium	7439-93-2	136		0.25	2.2		1
01657	Magnesium	7439-95-4	6,490		2.84	11.2		1
06958	Manganese	7439-96-5	480		0.0872	0.559		1
10145	Phosphorus	7723-14-0	479		0.626	11.2		1
01662	Potassium	7440-09-7	5,130		20.1	55.9		1
01667	Sodium	7440-23-5	1,230		41.7	112		1
07968	Strontium	7440-24-6	139		0.0693	0.559		1
06969	Tin	7440-31-5	424		1.12	11.2		1
06970	Titanium	7440-32-6	1,820		0.849	2.23		2
10146	Zirconium	7440-67-7	109		0.939	5.59		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.943		0.0657	0.219		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.								
06125	Arsenic	7440-38-2	9.93		0.0657	0.438		2
06126	Barium	7440-39-3	135		0.118	0.438		2
06127	Beryllium	7440-41-7	1.95		0.0175	0.110		2
06128	Cadmium	7440-43-9	1.52		0.0394	0.110		2
06131	Chromium	7440-47-3	49.1		0.131	0.438		2
06132	Cobalt	7440-48-4	63.4		0.0219	0.110		2
06133	Copper	7440-50-8	22.5		0.0723	0.438		2
06135	Lead	7439-92-1	12.5		0.0114	0.219		2
06138	Molybdenum	7439-98-7	13.4		0.0548	0.110		2
06139	Nickel	7440-02-0	28.1		0.110	0.438		2
06141	Selenium	7782-49-2	2.64		0.0438	0.438		2
06142	Silver	7440-22-4	13.4		0.0131	0.110		2
06145	Thallium	7440-28-0	0.853		0.0329	0.110		2
06148	Vanadium	7440-62-2	89.7		0.0241	0.110		2
06149	Zinc	7440-66-6	91.9		0.614	3.29		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 7471A**		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.171	0.0031	0.108		1
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	12.6	0.90	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	30.0	0.90	1.7		1
	EPA 314.0		ug/kg	ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	525	10.2	33.9		1
	SW-846 7199		mg/kg	mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	44.8	1.1	5.6		5
	SW-846 9012B		mg/kg	mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	6.0	0.20	0.55		1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-006-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 05:04	Laura M Krieger	0.95
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 05:48	Laura M Krieger	0.91
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 04:05	Sara E Johnson	22.32
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:00	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 16:57	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	12/30/2010 21:21	Timothy J Trees	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 00:58	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/29/2010 20:30	Chad A Moline	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 17:44	Marie D John	24.65
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:55	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 02:29	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 23:18	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 03:25	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 22:08	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 07:18	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 02:42	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:03	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:33	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163872
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:33	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:33	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:33	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:50	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 14:31	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 14:31	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 01:55	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10364243201A	01/03/2011 22:59	Venia B McFadden	5
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102201A	12/27/2010 18:48	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102201A	12/27/2010 08:55	Nancy J Shoop	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg	ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	280	6.9	8.2		0.91
06192	Benzene	71-43-2	20	0.10	4.1		0.91
06192	Bromobenzene	108-86-1	16	0.13	4.1		0.91
06192	Bromochloromethane	74-97-5	19	0.34	4.1		0.91
06192	Bromodichloromethane	75-27-4	19	0.08	4.1		0.91
06192	Bromoform	75-25-2	17	0.41	4.1		0.91
06192	Bromomethane	74-83-9	13	0.26	4.1		0.91
06192	2-Butanone	78-93-3	180	1.3	8.2		0.91
06192	n-Butylbenzene	104-51-8	14	0.12	4.1		0.91
06192	sec-Butylbenzene	135-98-8	15	0.06	4.1		0.91
06192	tert-Butylbenzene	98-06-6	15	0.16	4.1		0.91
06192	Carbon Tetrachloride	56-23-5	20	0.14	4.1		0.91
06192	Chlorobenzene	108-90-7	17	0.11	4.1		0.91
06192	Chloroethane	75-00-3	14	0.13	4.1		0.91
06192	2-Chloroethyl Vinyl Ether	110-75-8	18	0.31	4.1		0.91
06192	Chloroform	67-66-3	20	0.12	4.1		0.91
06192	Chloromethane	74-87-3	15	0.34	4.1		0.91
06192	2-Chlorotoluene	95-49-8	16	0.14	4.1		0.91
06192	4-Chlorotoluene	106-43-4	15	0.14	4.1		0.91
06192	Chlorotrifluoroethene	79-38-9	22	0.53	5.3		0.93
06192	1,2-Dibromo-3-chloropropane	96-12-8	16	0.72	4.1		0.91
06192	Dibromochloromethane	124-48-1	18	0.21	4.1		0.91
06192	1,2-Dibromoethane	106-93-4	18	0.17	4.1		0.91
06192	Dibromomethane	74-95-3	19	0.25	4.1		0.91
06192	1,2-Dichlorobenzene	95-50-1	15	0.09	4.1		0.91
06192	1,3-Dichlorobenzene	541-73-1	14	0.12	4.1		0.91
06192	1,4-Dichlorobenzene	106-46-7	14	0.16	4.1		0.91
06192	Dichlorodifluoromethane	75-71-8	10	0.12	4.1		0.91
06192	1,1-Dichloroethane	75-34-3	20	0.10	4.1		0.91
06192	1,2-Dichloroethane	107-06-2	19	0.15	4.1		0.91
06192	1,1-Dichloroethene	75-35-4	20	0.40	4.1		0.91
06192	cis-1,2-Dichloroethene	156-59-2	19	0.20	4.1		0.91
06192	trans-1,2-Dichloroethene	156-60-5	19	0.12	4.1		0.91
06192	1,2-Dichloropropane	78-87-5	19	0.17	4.1		0.91
06192	1,3-Dichloropropane	142-28-9	19	0.08	4.1		0.91
06192	2,2-Dichloropropane	594-20-7	19	0.17	4.1		0.91
06192	1,1-Dichloropropene	563-58-6	19	0.13	4.1		0.91
06192	cis-1,3-Dichloropropene	10061-01-5	17	0.16	4.1		0.91
06192	trans-1,3-Dichloropropene	10061-02-6	17	0.17	4.1		0.91
06192	Ethylbenzene	100-41-4	17	0.06	4.1		0.91
06192	Freon 113	76-13-1	20	0.11	4.1		0.91
06192	Freon 133a	75-88-7	20	0.53	5.3		0.93
06192	Hexachlorobutadiene	87-68-3	10	0.14	4.1		0.91
06192	2-Hexanone	591-78-6	82	1.6	8.2		0.91
06192	Isopropylbenzene	98-82-8	16	0.06	4.1		0.91
06192	p-Isopropyltoluene	99-87-6	15	0.11	4.1		0.91
06192	Methyl Tertiary Butyl Ether	1634-04-4	18	0.22	4.1		0.91
06192	4-Methyl-2-pentanone	108-10-1	72	0.40	8.2		0.91
06192	Methylene Chloride	75-09-2	19	0.25	4.1		0.91
06192	n-Propylbenzene	103-65-1	17	0.07	4.1		0.91

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	16		0.10	4.1		0.91
06192	1,1,1,2-Tetrachloroethane	630-20-6	18		0.11	4.1		0.91
06192	1,1,2,2-Tetrachloroethane	79-34-5	18		0.24	4.1		0.91
06192	Tetrachloroethene	127-18-4	17		0.21	4.1		0.91
06192	Toluene	108-88-3	18		0.08	4.1		0.91
06192	1,2,3-Trichlorobenzene	87-61-6	10		0.14	4.1		0.91
06192	1,2,4-Trichlorobenzene	120-82-1	10		0.19	4.1		0.91
06192	1,1,1-Trichloroethane	71-55-6	20		0.21	4.1		0.91
06192	1,1,2-Trichloroethane	79-00-5	18		0.28	4.1		0.91
06192	Trichloroethene	79-01-6	18		0.15	4.1		0.91
06192	Trichlorofluoromethane	75-69-4	17		0.30	4.1		0.91
06192	1,2,3-Trichloropropane	96-18-4	18		0.34	4.1		0.91
06192	1,2,4-Trimethylbenzene	95-63-6	16		0.41	4.1		0.91
06192	1,3,5-Trimethylbenzene	108-67-8	16		0.10	4.1		0.91
06192	Vinyl Chloride	75-01-4	15		0.21	4.1		0.91
06192	m+p-Xylene	179601-23-1	34		0.17	4.1		0.91
06192	o-Xylene	95-47-6	16		0.17	4.1		0.91
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	120		5.1	15		22.56
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	624		18.8	37.6		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Acenaphthene	83-32-9	1,600		19	190		1
04688	Acenaphthylene	208-96-8	1,600		19	190		1
04688	Aniline	62-53-3	840		190	560		1
04688	Anthracene	120-12-7	1,600		19	190		1
04688	Benzidine	92-87-5	2,200	J	1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,600		19	190		1
04688	Benzo(a)pyrene	50-32-8	1,400		19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,300		19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,300		19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,600		19	190		1
04688	Benzoic acid	65-85-0	880		190	560		1
04688	Benzyl alcohol	100-51-6	1,700		190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	1,500		19	190		1
04688	Butylbenzylphthalate	85-68-7	1,700		19	190		1
04688	Di-n-butylphthalate	84-74-2	1,600		19	190		1
04688	Carbazole	86-74-8	1,600		19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	1,600		38	190		1
04688	4-Chloroaniline	106-47-8	710		75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,600		19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,600		19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,700		19	190		1
04688	2-Chloronaphthalene	91-58-7	1,600		19	190		1
04688	2-Chlorophenol	95-57-8	1,600		19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,500		38	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Chrysene	218-01-9	1,600		19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,400		19	190		1
04688	Dibenzofuran	132-64-9	1,600		19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,500		19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,500		19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,500		19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	610		110	380		1
04688	2,4-Dichlorophenol	120-83-2	1,700		19	190		1
04688	Diethylphthalate	84-66-2	1,600		19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,600		38	190		1
04688	3,5-Dimethylphenol	108-68-9	1,700		38	190		1
04688	Dimethylphthalate	131-11-3	1,600		19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,200		190	560		1
04688	2,4-Dinitrophenol	51-28-5	1,400	J	750	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	1,600		38	190		1
04688	2,6-Dinitrotoluene	606-20-2	1,500		19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	1,700		19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,700		19	380		1
04688	Fluoranthene	206-44-0	1,600		19	190		1
04688	Fluorene	86-73-7	1,600		19	190		1
04688	Hexachlorobenzene	118-74-1	1,500		19	190		1
04688	Hexachlorobutadiene	87-68-3	1,400		75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	2,300		190	560		1
04688	Hexachloroethane	67-72-1	1,400		19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,400		19	190		1
04688	Isophorone	78-59-1	1,600		19	190		1
04688	1-Methylnaphthalene	90-12-0	1,600		19	190		1
04688	2-Methylnaphthalene	91-57-6	1,500		19	190		1
04688	2-Methylphenol	95-48-7	1,700		38	190		1
04688	4-Methylphenol	106-44-5	1,600		38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	Naphthalene	91-20-3	1,500		19	190		1
04688	2-Nitroaniline	88-74-4	1,600		19	190		1
04688	3-Nitroaniline	99-09-2	1,500		38	190		1
04688	4-Nitroaniline	100-01-6	1,200		75	190		1
04688	Nitrobenzene	98-95-3	1,600		19	190		1
04688	2-Nitrophenol	88-75-5	1,500		19	190		1
04688	4-Nitrophenol	100-02-7	1,500		190	560		1
04688	N-Nitrosodimethylamine	62-75-9	1,600		38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,600		19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,600		19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	1,600		19	190		1
04688	Pentachlorophenol	87-86-5	1,100		190	560		1
04688	Phenanthrene	85-01-8	1,600		19	190		1
04688	Phenol	108-95-2	1,600		19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
04688	Pyrene	129-00-0	1,600	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,500	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	1,500	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	1,500	38	190		1
	The following compounds were detected in the method blank at the respective concentrations of: diethylphthalate 28 ug/kg bis(2-ethylhexyl)phthalate 18 ug/kg These blank values were not subtracted from the analytical results.						
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	33	0.75	1.9		1
10138	Acenaphthylene	208-96-8	36	0.38	1.9		1
10138	Anthracene	120-12-7	36	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	35	0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	34	0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	39	0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	19	0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	36	0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	39	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	39	6.8	20		1
10138	Chrysene	218-01-9	36	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	22	0.75	1.9		1
10138	Diethylphthalate	84-66-2	42	6.8	20		1
10138	Dimethylphthalate	131-11-3	38	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	43	6.8	20		1
10138	Fluoranthene	206-44-0	39	0.75	1.9		1
10138	Fluorene	86-73-7	36	0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	21	0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	33	0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	31	0.75	1.9		1
10138	Naphthalene	91-20-3	31	0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	30	0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	43	6.8	20		1
10138	Phenanthrene	85-01-8	33	0.75	1.9		1
10138	Pyrene	129-00-0	33	0.75	1.9		1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.						
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	7.9	0.2	1.1		24.13
Explosives	**SW-846 8330A**		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	3,000	85	170	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	3,000	56	170	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	340	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	340	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	2,900		56	170	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	2,800		56	170	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	3,000		56	170	10000000	1
10132	HMX	2691-41-0	2,400		140	420	10000000	1
10132	Nitrobenzene	98-95-3	2,800		56	170	10000000	1
10132	Nitroglycerin	55-63-0	63,000		1,100	3,400	10000000	1
10132	2-Nitrotoluene	88-72-2	3,000		110	170	10000000	1
10132	3-Nitrotoluene	99-08-1	3,000		140	170	10000000	1
10132	4-Nitrotoluene	99-99-0	3,000		110	170	10000000	1
10132	PETN	78-11-5	73,000		1,100	3,400	10000000	1
10132	RDX	121-82-4	2,800		71	170	10000000	1
10132	Tetryl	479-45-8	3,800		86	170	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	3,300		56	170	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	3,000		56	170	10000000	1
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	5,600		680	1,700		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	2.0	J	1.1	3.7		1
10225	PCB-1016	12674-11-2	21		0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9		1
10225	PCB-1232	11141-16-5	0.59	U	0.59	1.9		1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9		1
10225	PCB-1254	11097-69-1	6.8		0.37	1.9		1
10225	PCB-1260	11096-82-5	22		0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.								
GC Miscellaneous	**SW-846 8015B**		ug/kg		ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	2,400		110	560		1
10501	Isopropanol	67-63-0	2,400		110	560		1
10501	Methanol	67-56-1	2,400		110	560		1
Terphenyls	**SW-846 8015B**		mg/kg		mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7	J	1.6	4.0		1
10318	o-Terphenyl	84-15-1	1.7	J	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	J	1.7	4.0		1
Metals	**SW-846 6010B**		mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	26,200		5.57	22.1		1
07914	Boron	7440-42-8	212		0.985	5.53		1
01650	Calcium	7440-70-2	6,360		6.78	22.1		1
01654	Iron	7439-89-6	30,500		10.4	44.3		2
01656	Lithium	7439-93-2	134		0.24	2.2		1
01657	Magnesium	7439-95-4	6,550		2.81	11.1		1
06958	Manganese	7439-96-5	487		0.0863	0.553		1
10145	Phosphorus	7723-14-0	539		0.620	11.1		1
01662	Potassium	7440-09-7	4,740		19.9	55.3		1
01667	Sodium	7440-23-5	1,220		41.3	111		1
07968	Strontium	7440-24-6	138		0.0686	0.553		1
06969	Tin	7440-31-5	416		1.11	11.1		1
06970	Titanium	7440-32-6	1,750		0.841	2.21		2
10146	Zirconium	7440-67-7	108		0.929	5.53		1
	SW-846 6020		mg/kg		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	1.05		0.0670	0.223		2
Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.								
06125	Arsenic	7440-38-2	10.3		0.0670	0.447		2
06126	Barium	7440-39-3	140		0.121	0.447		2
06127	Beryllium	7440-41-7	1.92		0.0179	0.112		2
06128	Cadmium	7440-43-9	1.64		0.0402	0.112		2
06131	Chromium	7440-47-3	49.0		0.134	0.447		2
06132	Cobalt	7440-48-4	69.6		0.0223	0.112		2
06133	Copper	7440-50-8	23.1		0.0738	0.447		2
06135	Lead	7439-92-1	11.7		0.0116	0.223		2
06138	Molybdenum	7439-98-7	15.4		0.0559	0.112		2
06139	Nickel	7440-02-0	28.4		0.112	0.447		2
06141	Selenium	7782-49-2	2.84		0.0447	0.447		2
06142	Silver	7440-22-4	14.6		0.0134	0.112		2
06145	Thallium	7440-28-0	0.887		0.0335	0.112		2
06148	Vanadium	7440-62-2	85.5		0.0246	0.112		2
06149	Zinc	7440-66-6	98.2		0.626	3.35		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 7471A**		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.177	0.0032	0.111		1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-006-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 05:26	Laura M Krieger	0.91
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 06:11	Laura M Krieger	0.93
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 04:25	Sara E Johnson	22.56
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:05	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 17:02	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	12/30/2010 21:38	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 01:24	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/29/2010 21:04	Chad A Moline	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 18:20	Marie D John	24.13
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:54	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 03:12	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 23:27	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 03:43	Lindsey K Lafferty	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 22:23	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 08:03	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/22/2010 02:45	Tara L Snyder	2
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 02:45	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:07	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:36	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:36	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:36	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:36	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:51	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163873
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163874
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	20,900		5.51	21.9		1
07914	Boron	7440-42-8	6.58		0.975	5.48		1
01650	Calcium	7440-70-2	6,360		6.72	21.9		1
01654	Iron	7439-89-6	28,700		5.16	21.9		1
01656	Lithium	7439-93-2	24.9		0.24	2.2		1
01657	Magnesium	7439-95-4	5,900		2.78	11.0		1
06958	Manganese	7439-96-5	389		0.0855	0.548		1
10145	Phosphorus	7723-14-0	428		0.614	11.0		1
01662	Potassium	7440-09-7	3,270		19.7	54.8		1
01667	Sodium	7440-23-5	176		40.9	110		1
07968	Strontium	7440-24-6	29.4		0.0679	0.548		1
06969	Tin	7440-31-5	2.33	J	1.10	11.0		1
06970	Titanium	7440-32-6	1,390		0.833	2.19		2
10146	Zirconium	7440-67-7	4.57	J	0.920	5.48		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.165	J	0.0664	0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.92		0.0664	0.443		2
06126	Barium	7440-39-3	139		0.120	0.443		2
06127	Beryllium	7440-41-7	0.961		0.0177	0.111		2
06128	Cadmium	7440-43-9	0.120		0.0398	0.111		2
06131	Chromium	7440-47-3	40.6		0.133	0.443		2
06132	Cobalt	7440-48-4	9.52		0.0221	0.111		2
06133	Copper	7440-50-8	12.9		0.0730	0.443		2
06135	Lead	7439-92-1	9.48		0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.646		0.0553	0.111		2
06139	Nickel	7440-02-0	18.5		0.111	0.443		2
06141	Selenium	7782-49-2	0.265	J	0.0443	0.443		2
06142	Silver	7440-22-4	0.0262	J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.366		0.0332	0.111		2
06148	Vanadium	7440-62-2	80.2		0.0243	0.111		2
06149	Zinc	7440-66-6	90.1		0.620	3.32		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032	U	0.0032	0.111		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.1		0.90	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	11.6		0.90	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2	U	10.2	33.9		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.36	J	0.23	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-006-SA5C-SB-4.0-5.0DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163874
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9012B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.55		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	394		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.16		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3	n.a.	11.4		0.50	0.50		1
11626	28a Moisture Content by 160.3	n.a.	11.7		0.50	0.50		1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 02:38	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:00	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:30	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163874
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0645 SDG#: DE037-03DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:29	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:30	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:30	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:30	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:49	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 14:16	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 14:16	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 01:31	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10364243201A	01/03/2011 23:47	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102201A	12/27/2010 18:49	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102201A	12/27/2010 08:55	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

EB-15 SDG#: DE037-04EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	7	J	6	20		1
10904	Benzene	71-43-2	0.5	U	0.5	5		1
10904	Bromobenzene	108-86-1	1	U	1	5		1
10904	Bromochloromethane	74-97-5	1	U	1	5		1
10904	Bromodichloromethane	75-27-4	1	U	1	5		1
10904	Bromoform	75-25-2	1	U	1	5		1
10904	Bromomethane	74-83-9	1	U	1	5		1
10904	2-Butanone	78-93-3	3	U	3	10		1
10904	n-Butylbenzene	104-51-8	1	U	1	5		1
10904	sec-Butylbenzene	135-98-8	1	U	1	5		1
10904	tert-Butylbenzene	98-06-6	1	U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1	U	1	5		1
10904	Chlorobenzene	108-90-7	0.8	U	0.8	5		1
10904	Chloroethane	75-00-3	1	U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2	U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.							
10904	Chloroform	67-66-3	0.8	U	0.8	5		1
10904	Chloromethane	74-87-3	1	U	1	5		1
10904	2-Chlorotoluene	95-49-8	1	U	1	5		1
10904	4-Chlorotoluene	106-43-4	1	U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2	U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2	U	2	5		1
10904	Dibromochloromethane	124-48-1	1	U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1	U	1	5		1
10904	Dibromomethane	74-95-3	1	U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2	U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1	U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1	U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8	U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8	U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8	U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1	U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1	U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1	U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1	U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1	U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1	U	1	5		1
10904	Ethylbenzene	100-41-4	0.8	U	0.8	5		1
10904	Freon 113	76-13-1	2	U	2	10		1
10904	Freon 133a	75-88-7	2	U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2	U	2	5		1
10904	2-Hexanone	591-78-6	3	U	3	10		1
10904	Isopropylbenzene	98-82-8	1	U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1	U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5	U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3	U	3	10		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

EB-15 SDG#: DE037-04EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10904	Methylene Chloride	75-09-2	2	U	2	5		1
10904	n-Propylbenzene	103-65-1	1	U	1	5		1
10904	Styrene	100-42-5	1	U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8	U	0.8	5		1
10904	Toluene	108-88-3	0.7	U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1	U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8	U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8	U	0.8	5		1
10904	Trichloroethene	79-01-6	1	U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2	U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1	U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5		1
10904	Vinyl Chloride	75-01-4	1	U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8	U	0.8	5		1
10904	o-Xylene	95-47-6	0.8	U	0.8	5		1

Preservation requirements were not met. The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH = 4.

GC/MS Volatiles	**SW-846 8260B SIM**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
00527	1,4-Dioxane	123-91-1	0.5	U	0.5	2.0		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
04678	Aniline	62-53-3	1	U	1	5		1
04678	Benzidine	92-87-5	20	U	20	60		1
04678	Benzoic acid	65-85-0	6	U	6	15		1
04678	Benzyl alcohol	100-51-6	5	U	5	15		1
04678	4-Bromophenyl-phenylether	101-55-3	1	U	1	5		1
04678	Carbazole	86-74-8	1	U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1	U	1	5		1
04678	4-Chloroaniline	106-47-8	1	U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1	U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2	U	2	5		1
04678	2-Chlorophenol	95-57-8	1	U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2	U	2	5		1
04678	Dibenzofuran	132-64-9	1	U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1	U	1	5		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

EB-15 SDG#: DE037-04EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l		ug/l	ug/l	ug/l	
04678	2,4-Dimethylphenol	105-67-9	3	U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3	U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	15		1
04678	2,4-Dinitrophenol	51-28-5	10	U	10	30		1
04678	2,4-Dinitrotoluene	121-14-2	1	U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1	U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1	U	1	5		1
04678	Hexachlorobenzene	118-74-1	1	U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1	U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5	U	5	15		1
04678	Hexachloroethane	67-72-1	1	U	1	5		1
04678	Isophorone	78-59-1	1	U	1	5		1
04678	2-Methylphenol	95-48-7	1	U	1	5		1
04678	4-Methylphenol	106-44-5	2	U	2	5		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1	U	1	5		1
04678	3-Nitroaniline	99-09-2	1	U	1	5		1
04678	4-Nitroaniline	100-01-6	1	U	1	5		1
04678	Nitrobenzene	98-95-3	1	U	1	5		1
04678	2-Nitrophenol	88-75-5	1	U	1	5		1
04678	4-Nitrophenol	100-02-7	10	U	10	30		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2	U	2	5		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04678	Pentachlorophenol	87-86-5	3	U	3	15		1
04678	Phenol	108-95-2	1	U	1	5		1
04678	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1	U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1	U	1	5		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l		ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.010	U	0.010	0.050		1
10137	Acenaphthylene	208-96-8	0.010	U	0.010	0.050		1
10137	Anthracene	120-12-7	0.010	U	0.010	0.050		1
10137	Benzo(a)anthracene	56-55-3	0.010	U	0.010	0.050		1
10137	Benzo(a)pyrene	50-32-8	0.010	U	0.010	0.050		1
10137	Benzo(b)fluoranthene	205-99-2	0.010	U	0.010	0.050		1
10137	Benzo(g,h,i)perylene	191-24-2	0.010	U	0.010	0.050		1
10137	Benzo(k)fluoranthene	207-08-9	0.010	U	0.010	0.050		1
10137	Butylbenzylphthalate	85-68-7	0.093	J	0.050	1.0		1
10137	Di-n-butylphthalate	84-74-2	0.31	J	0.050	1.0		1
10137	Chrysene	218-01-9	0.010	U	0.010	0.050		1
10137	Dibenz(a,h)anthracene	53-70-3	0.010	U	0.010	0.050		1
10137	Diethylphthalate	84-66-2	0.11	J	0.050	1.0		1
10137	Dimethylphthalate	131-11-3	0.050	U	0.050	1.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

EB-15 SDG#: DE037-04EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.24	J	0.050	1.0		1
10137	Fluoranthene	206-44-0	0.010	U	0.010	0.050		1
10137	Fluorene	86-73-7	0.010	U	0.010	0.050		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.010	U	0.010	0.050		1
10137	1-Methylnaphthalene	90-12-0	0.010	U	0.010	0.050		1
10137	2-Methylnaphthalene	91-57-6	0.010	U	0.010	0.050		1
10137	Naphthalene	91-20-3	0.033	J	0.010	0.050		1
10137	N-Nitrosodimethylamine	62-75-9	0.010	U	0.010	0.050		1
10137	Di-n-octylphthalate	117-84-0	0.082	J	0.050	1.0		1
10137	Phenanthrene	85-01-8	0.018	J	0.010	0.050		1
10137	Pyrene	129-00-0	0.010	U	0.010	0.050		1

The following compounds were detected in the method blank at the respective concentrations of:
diethylphthalate .063 ug/l
di-n-butylphthalate .13 ug/l
butylbenzylphthalate .076 ug/l
bis(2-ethylhexyl)phthalate .11 ug/l
di-n-octylphthalate .084 ug/l
These blank values were not subtracted from the analytical results.

Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10407	2,4-D	94-75-7	0.18	U	0.18	0.56		1
10407	Dalapon	75-99-0	0.28	U	0.28	1.4		1
10407	2,4-DB	94-82-6	0.33	U	0.33	1.1		1
10407	Dicamba	1918-00-9	0.089	U	0.089	0.33		1
10407	Dinoseb	88-85-7	0.11	U	0.11	0.56		1
10407	2,4-DP (Dichlorprop)	120-36-5	0.18	U	0.18	0.56		1
10407	MCPA	94-74-6	330	U	330	1,100		1
10407	MCPP	93-65-2	56	U	56	220		1
10407	2,4,5-T	93-76-5	0.017	U	0.017	0.056		1
10407	2,4,5-TP	93-72-1	0.011	U	0.011	0.056		1
Pesticides/PCBs	**SW-846 8081A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
00177	Aldrin	309-00-2	0.0021	U	0.0021	0.010		1
00177	Alpha BHC	319-84-6	0.0031	U	0.0031	0.010		1
00177	Beta BHC	319-85-7	0.0030	U	0.0030	0.010		1
00177	Gamma BHC - Lindane	58-89-9	0.0021	U	0.0021	0.010		1
00177	Chlordane	57-74-9	0.13	U	0.13	0.52		1
00177	p,p-DDD	72-54-8	0.0052	U	0.0052	0.021		1
00177	p,p-DDE	72-55-9	0.0052	U	0.0052	0.021		1
00177	p,p-DDT	50-29-3	0.0052	U	0.0052	0.021		1
00177	Delta BHC	319-86-8	0.0030	U	0.0030	0.010		1
00177	Dieldrin	60-57-1	0.0056	U	0.0056	0.021		1
00177	Endosulfan I	959-98-8	0.0045	U	0.0045	0.010		1
00177	Endosulfan II	33213-65-9	0.016	U	0.016	0.021		1
00177	Endosulfan Sulfate	1031-07-8	0.0061	U	0.0061	0.021		1
00177	Endrin	72-20-8	0.0085	U	0.0085	0.021		1
00177	Endrin Aldehyde	7421-93-4	0.021	U	0.021	0.10		1
00177	Endrin Ketone	53494-70-5	0.0052	U	0.0052	0.021		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

EB-15 SDG#: DE037-04EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
00177	Heptachlor	76-44-8	0.0027	U	0.0027	0.010		1
00177	Heptachlor Epoxide	1024-57-3	0.0024	U	0.0024	0.010		1
00177	Methoxychlor	72-43-5	0.031	U	0.031	0.10		1
00177	Mirex	2385-85-5	0.089	U	0.089	0.26		1
00177	Toxaphene	8001-35-2	1.0	U	1.0	3.1		1
Pesticides/PCBs	**SW-846 8082**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10227	Aroclor 5432	63496-31-1	0.10	U	0.10	0.52		1
10227	Aroclor 5442	12642-23-8	0.10	U	0.10	0.52		1
10227	Aroclor 5460	11126-42-4	0.10	U	0.10	0.52		1
10227	PCB-1016	12674-11-2	0.10	U	0.10	0.52		1
10227	PCB-1221	11104-28-2	0.10	U	0.10	0.52		1
10227	PCB-1232	11141-16-5	0.21	U	0.21	0.52		1
10227	PCB-1242	53469-21-9	0.10	U	0.10	0.52		1
10227	PCB-1248	12672-29-6	0.10	U	0.10	0.52		1
10227	PCB-1254	11097-69-1	0.10	U	0.10	0.52		1
10227	PCB-1260	11096-82-5	0.10	U	0.10	0.52		1
10227	PCB-1262	37324-23-5	0.21	U	0.21	0.52		1
10227	PCB-1268	11100-14-4	0.17	U	0.17	0.52		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.0834	U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138	U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702	U	0.0702	0.200		1
01754	Iron	7439-89-6	0.0522	U	0.0522	0.200		1
01756	Lithium	7439-93-2	0.0024	U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172	U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084	U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089	U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239	U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433	U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089	U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098	U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038	U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206	U	0.0206	0.0500		1
	SW-846 6020		**mg/l**		**mg/l**	**mg/l**	**mg/l**	
06024	Antimony	7440-36-0	0.00030	U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095	U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00038	U	0.00038	0.0020		1
06027	Beryllium	7440-41-7	0.00013	U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020	U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060	U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010	U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038	U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000099	J	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025	U	0.00025	0.00050		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

EB-15 SDG#: DE037-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020		1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
	EPA 314.0		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
	SW-846 7199		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1
	EPA 150.1		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00200	22b pH by 9040B	n.a.	5.2	0.010	0.010		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	Y103512AA	12/18/2010 00:05	Frank A Valla, Jr	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103491AA	12/15/2010 10:47	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E103491AA	12/15/2010 10:47	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y103512AA	12/18/2010 00:05	Frank A Valla, Jr	1
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	10350WAB026	12/31/2010 22:37	Ryan P Byrne	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10349WAI026	12/22/2010 22:23	Gregory J Drahovsky	1
00813	BNA Water Extraction	SW-846 3510C	1	10350WAB026	12/16/2010 14:50	Timothy J Attenberger	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163875
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

EB-15 SDG#: DE037-04EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10466	BNA Water Extraction SIM	SW-846 3510C	1	10349WAI026	12/16/2010 09:30	Olivia Arosemena	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	103490003A	12/17/2010 21:06	John W Perkins	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103500016A	12/24/2010 11:15	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	103500017A	12/22/2010 09:23	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	103500017A	12/16/2010 21:25	Karen L Beyer	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	103500016A	12/16/2010 21:25	Karen L Beyer	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	103490003A	12/15/2010 12:30	Kelli M Barto	1
01743	Aluminum	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
08014	Boron	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
01754	Iron	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
01756	Lithium	SW-846 6010B	1	103551848003	12/23/2010 16:59	John P Hook	1
01757	Magnesium	SW-846 6010B	1	103551848003	12/23/2010 16:59	John P Hook	1
07058	Manganese	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
10143	Phosphorus	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
01762	Potassium	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
01767	Sodium	SW-846 6010B	1	103551848003	12/23/2010 16:59	John P Hook	1
08068	Strontium	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
07069	Tin	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
07070	Titanium	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
10144	Zirconium	SW-846 6010B	1	103551848003	12/23/2010 00:09	John W Yanzuk II	1
06024	Antimony	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06026	Barium	SW-846 6020	1	103556050002D	12/23/2010 20:18	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06033	Copper	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06035	Lead	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	103556050002C	12/23/2010 20:18	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	103556050002B	12/23/2010 20:18	Choon Y Tian	1
06042	Silver	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	103556050002A	12/23/2010 20:18	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	103545713001	12/21/2010 06:26	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	103551848003	12/22/2010 09:26	Denise K Conners	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	103556050002	12/22/2010 08:48	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	103545713001	12/20/2010 13:45	Damary Valentin	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	10350196902A	12/17/2010 07:44	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	10352658701A	12/18/2010 14:59	Venia B McFadden	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	10348113001A	12/14/2010 11:57	Nicole M Kepley	1
00200	22b pH by 9040B	EPA 150.1	1	10351020001A	12/17/2010 19:45	Luz M Groff	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.7	U	6.7	8.0		0.92
06192	Benzene	71-43-2	0.10	U	0.10	4.0		0.92
06192	Bromobenzene	108-86-1	0.13	U	0.13	4.0		0.92
06192	Bromochloromethane	74-97-5	0.33	U	0.33	4.0		0.92
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.0		0.92
06192	Bromoform	75-25-2	0.40	U	0.40	4.0		0.92
06192	Bromomethane	74-83-9	0.25	U	0.25	4.0		0.92
06192	2-Butanone	78-93-3	1.2	U	1.2	8.0		0.92
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.0		0.92
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.0		0.92
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	4.0		0.92
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	4.0		0.92
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.0		0.92
06192	Chloroethane	75-00-3	0.13	U	0.13	4.0		0.92
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30	U	0.30	4.0		0.92
06192	Chloroform	67-66-3	0.14	J	0.12	4.0		0.92
06192	Chloromethane	74-87-3	0.33	U	0.33	4.0		0.92
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	4.0		0.92
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	4.0		0.92
06192	Chlorotrifluoroethene	79-38-9	0.50	U	0.50	5.0		0.92
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.70	U	0.70	4.0		0.92
06192	Dibromochloromethane	124-48-1	0.20	U	0.20	4.0		0.92
06192	1,2-Dibromoethane	106-93-4	0.17	U	0.17	4.0		0.92
06192	Dibromomethane	74-95-3	0.24	U	0.24	4.0		0.92
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.0		0.92
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.0		0.92
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	4.0		0.92
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.0		0.92
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.0		0.92
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	4.0		0.92
06192	1,1-Dichloroethene	75-35-4	0.39	U	0.39	4.0		0.92
06192	cis-1,2-Dichloroethene	156-59-2	0.19	U	0.19	4.0		0.92
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.0		0.92
06192	1,2-Dichloropropane	78-87-5	0.17	U	0.17	4.0		0.92
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.0		0.92
06192	2,2-Dichloropropane	594-20-7	0.17	U	0.17	4.0		0.92
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	4.0		0.92
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	4.0		0.92
06192	trans-1,3-Dichloropropene	10061-02-6	0.17	U	0.17	4.0		0.92
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.0		0.92
06192	Freon 113	76-13-1	0.11	U	0.11	4.0		0.92
06192	Freon 133a	75-88-7	0.50	U	0.50	5.0		0.92
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	4.0		0.92
06192	2-Hexanone	591-78-6	1.6	U	1.6	8.0		0.92
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.0		0.92
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.0		0.92
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21	U	0.21	4.0		0.92
06192	4-Methyl-2-pentanone	108-10-1	0.39	U	0.39	8.0		0.92
06192	Methylene Chloride	75-09-2	2.5	J	0.24	4.0		0.92
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.0		0.92

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.10	U	0.10	4.0		0.92
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.0		0.92
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23	U	0.23	4.0		0.92
06192	Tetrachloroethene	127-18-4	0.20	U	0.20	4.0		0.92
06192	Toluene	108-88-3	0.08	U	0.08	4.0		0.92
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	4.0		0.92
06192	1,2,4-Trichlorobenzene	120-82-1	0.18	U	0.18	4.0		0.92
06192	1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	4.0		0.92
06192	1,1,2-Trichloroethane	79-00-5	0.27	U	0.27	4.0		0.92
06192	Trichloroethene	79-01-6	0.15	U	0.15	4.0		0.92
06192	Trichlorofluoromethane	75-69-4	0.29	U	0.29	4.0		0.92
06192	1,2,3-Trichloropropane	96-18-4	0.33	U	0.33	4.0		0.92
06192	1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	4.0		0.92
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.0		0.92
06192	Vinyl Chloride	75-01-4	0.20	U	0.20	4.0		0.92
06192	m+p-Xylene	179601-23-1	0.17	U	0.17	4.0		0.92
06192	o-Xylene	95-47-6	0.17	U	0.17	4.0		0.92
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.3	U	5.3	16		24.32
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	143		36.3	72.5		2
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	540		1
04688	Benzyl alcohol	100-51-6	180	U	180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540		1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	360		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	540		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	20		1
10138	Chrysene	218-01-9	0.36	U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20		1
10138	Fluoranthene	206-44-0	0.73	U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U	0.73	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20		1
10138	Phenanthrene	85-01-8	0.73	U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73	U	0.73	1.8		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1		22.77
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	82	U	82	160	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	54	U	54	160	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	330	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	330	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	54	U	54	160	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	54	U	54	160	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	54	U	54	160	10000000	1
10132	HMX	2691-41-0	140	U	140	410	10000000	1
10132	Nitrobenzene	98-95-3	54	U	54	160	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,300	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	160	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U	140	160	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	160	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,300	10000000	1
10132	RDX	121-82-4	68	U	68	160	10000000	1
10132	Tetryl	479-45-8	83	U	83	160	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	54	U	54	160	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	54	U	54	160	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	650	U	650	1,600		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.9	J	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.8		1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.8		1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.8		1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.8		1
10225	PCB-1248	12672-29-6	5.1		0.36	1.8		1
10225	PCB-1254	11097-69-1	2.8		0.36	1.8		1
10225	PCB-1260	11096-82-5	0.71	J	0.36	1.8		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.8		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.8		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	540		1
10501	Isopropanol	67-63-0	110	U	110	540		1
10501	Methanol	67-56-1	110	U	110	540		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.6	U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6	U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6	U	1.6	3.8		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,200		5.37	21.3		1
07914	Boron	7440-42-8	4.96	J	0.949	5.33		1
01650	Calcium	7440-70-2	5,190		6.54	21.3		1
01654	Iron	7439-89-6	20,800		5.02	21.3		1
01656	Lithium	7439-93-2	19.4		0.23	2.1		1
01657	Magnesium	7439-95-4	4,250		2.71	10.7		1
06958	Manganese	7439-96-5	262		0.0832	0.533		1
10145	Phosphorus	7723-14-0	430		0.597	10.7		1
01662	Potassium	7440-09-7	2,790		19.2	53.3		1
01667	Sodium	7440-23-5	201		39.8	107		1
07968	Strontium	7440-24-6	25.0		0.0661	0.533		1
06969	Tin	7440-31-5	2.45	J	1.07	10.7		1
06970	Titanium	7440-32-6	1,230		0.811	2.13		2
10146	Zirconium	7440-67-7	1.20	J	0.896	5.33		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.156	J	0.0646	0.215		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.80		0.0646	0.431		2
06126	Barium	7440-39-3	138		0.116	0.431		2
06127	Beryllium	7440-41-7	0.657		0.0172	0.108		2
06128	Cadmium	7440-43-9	0.0887	J	0.0388	0.108		2
06131	Chromium	7440-47-3	24.3		0.129	0.431		2
06132	Cobalt	7440-48-4	7.35		0.0215	0.108		2
06133	Copper	7440-50-8	11.4		0.0711	0.431		2
06135	Lead	7439-92-1	6.51		0.0112	0.215		2
06138	Molybdenum	7439-98-7	0.684		0.0539	0.108		2
06139	Nickel	7440-02-0	12.0		0.108	0.431		2
06141	Selenium	7782-49-2	0.141	J	0.0431	0.431		2
06142	Silver	7440-22-4	0.0301	J	0.0129	0.108		2
06145	Thallium	7440-28-0	0.380		0.0323	0.108		2
06148	Vanadium	7440-62-2	57.3		0.0237	0.108		2
06149	Zinc	7440-66-6	94.7		0.603	3.23		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0031	U	0.0031	0.108		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.8		0.87	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	8.0		0.87	1.6		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.6		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.55		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	398		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.48		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	8.1		0.50	0.50		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0745 SDG#: DE037-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-007-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 06:33	Laura M Krieger	0.92
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 05:05	Sara E Johnson	24.32
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:11	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 17:07	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/05/2011 16:12	Timothy J Trees	2
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 02:40	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/29/2010 22:45	Chad A Moline	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 18:57	Marie D John	22.77
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:53	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 03:54	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 23:37	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 04:02	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0745 SDG#: DE037-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103500005A	12/17/2010 19:47	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 14:02	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103500005A	12/16/2010 14:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:00	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:30	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:54	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:36	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:54	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:54	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:54	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:53	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 15:13	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 15:13	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 03:08	Venia B McFadden	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163876
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0745 SDG#: DE037-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 00:11	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:10	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.4	U	7.4	8.8		1
06192	Benzene	71-43-2	0.11	U	0.11	4.4		1
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.4		1
06192	Bromochloromethane	74-97-5	0.36	U	0.36	4.4		1
06192	Bromodichloromethane	75-27-4	0.09	U	0.09	4.4		1
06192	Bromoform	75-25-2	0.44	U	0.44	4.4		1
06192	Bromomethane	74-83-9	0.28	U	0.28	4.4		1
06192	2-Butanone	78-93-3	1.3	U	1.3	8.8		1
06192	n-Butylbenzene	104-51-8	0.13	U	0.13	4.4		1
06192	sec-Butylbenzene	135-98-8	0.07	U	0.07	4.4		1
06192	tert-Butylbenzene	98-06-6	0.18	U	0.18	4.4		1
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.4		1
06192	Chlorobenzene	108-90-7	0.12	U	0.12	4.4		1
06192	Chloroethane	75-00-3	0.14	U	0.14	4.4		1
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.33	U	0.33	4.4		1
06192	Chloroform	67-66-3	0.13	U	0.13	4.4		1
06192	Chloromethane	74-87-3	0.36	U	0.36	4.4		1
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.4		1
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.4		1
06192	Chlorotrifluoroethene	79-38-9	0.55	U	0.55	5.5		1
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.77	U	0.77	4.4		1
06192	Dibromochloromethane	124-48-1	0.22	U	0.22	4.4		1
06192	1,2-Dibromoethane	106-93-4	0.19	U	0.19	4.4		1
06192	Dibromomethane	74-95-3	0.26	U	0.26	4.4		1
06192	1,2-Dichlorobenzene	95-50-1	0.1	U	0.1	4.4		1
06192	1,3-Dichlorobenzene	541-73-1	0.13	U	0.13	4.4		1
06192	1,4-Dichlorobenzene	106-46-7	0.18	U	0.18	4.4		1
06192	Dichlorodifluoromethane	75-71-8	0.13	U	0.13	4.4		1
06192	1,1-Dichloroethane	75-34-3	0.11	U	0.11	4.4		1
06192	1,2-Dichloroethane	107-06-2	0.17	U	0.17	4.4		1
06192	1,1-Dichloroethene	75-35-4	0.43	U	0.43	4.4		1
06192	cis-1,2-Dichloroethene	156-59-2	0.21	U	0.21	4.4		1
06192	trans-1,2-Dichloroethene	156-60-5	0.13	U	0.13	4.4		1
06192	1,2-Dichloropropane	78-87-5	0.19	U	0.19	4.4		1
06192	1,3-Dichloropropane	142-28-9	0.09	U	0.09	4.4		1
06192	2,2-Dichloropropane	594-20-7	0.19	U	0.19	4.4		1
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.4		1
06192	cis-1,3-Dichloropropene	10061-01-5	0.18	U	0.18	4.4		1
06192	trans-1,3-Dichloropropene	10061-02-6	0.19	U	0.19	4.4		1
06192	Ethylbenzene	100-41-4	0.07	U	0.07	4.4		1
06192	Freon 113	76-13-1	0.12	U	0.12	4.4		1
06192	Freon 133a	75-88-7	0.55	U	0.55	5.5		1
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.4		1
06192	2-Hexanone	591-78-6	1.8	U	1.8	8.8		1
06192	Isopropylbenzene	98-82-8	0.07	U	0.07	4.4		1
06192	p-Isopropyltoluene	99-87-6	0.12	U	0.12	4.4		1
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.23	U	0.23	4.4		1
06192	4-Methyl-2-pentanone	108-10-1	0.43	U	0.43	8.8		1
06192	Methylene Chloride	75-09-2	1.4	J	0.26	4.4		1
06192	n-Propylbenzene	103-65-1	0.08	U	0.08	4.4		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.11	U	0.11	4.4		1
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12	U	0.12	4.4		1
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.25	U	0.25	4.4		1
06192	Tetrachloroethene	127-18-4	0.22	U	0.22	4.4		1
06192	Toluene	108-88-3	0.09	U	0.09	4.4		1
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.4		1
06192	1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	4.4		1
06192	1,1,1-Trichloroethane	71-55-6	0.22	U	0.22	4.4		1
06192	1,1,2-Trichloroethane	79-00-5	0.30	U	0.30	4.4		1
06192	Trichloroethene	79-01-6	0.17	U	0.17	4.4		1
06192	Trichlorofluoromethane	75-69-4	0.32	U	0.32	4.4		1
06192	1,2,3-Trichloropropane	96-18-4	0.36	U	0.36	4.4		1
06192	1,2,4-Trimethylbenzene	95-63-6	0.44	U	0.44	4.4		1
06192	1,3,5-Trimethylbenzene	108-67-8	0.11	U	0.11	4.4		1
06192	Vinyl Chloride	75-01-4	0.22	U	0.22	4.4		1
06192	m+p-Xylene	179601-23-1	0.19	U	0.19	4.4		1
06192	o-Xylene	95-47-6	0.19	U	0.19	4.4		1
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.0	U	5.0	15		22.85
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	105		36.7	73.4		2
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	370		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	37	U	37	180		1
04688	4-Methylphenol	106-44-5	37	U	37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	37	U	37	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.8		1
10138	Anthracene	120-12-7	0.37	U	0.37	1.8		1
10138	Benzo(a)anthracene	56-55-3	2.7		0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	2.0		0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	3.2		0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.3	J	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.5	J	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U	6.6	20		1
10138	Di-n-butylphthalate	84-74-2	12	J	6.6	20		1
10138	Chrysene	218-01-9	3.0		0.37	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U	6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U	6.6	20		1
10138	Fluoranthene	206-44-0	4.3		0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.98	J	0.73	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6	U	6.6	20		1
10138	Phenanthrene	85-01-8	1.1	J	0.73	1.8		1
10138	Pyrene	129-00-0	3.6		0.73	1.8		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.1		23.85
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	83	U	83	170	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	55	U	55	170	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	330	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	330	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	55	U	55	170	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	55	U	55	170	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	55	U	55	170	10000000	1
10132	HMX	2691-41-0	140	U	140	410	10000000	1
10132	Nitrobenzene	98-95-3	55	U	55	170	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,300	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	170	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U	140	170	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	170	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,300	10000000	1
10132	RDX	121-82-4	69	U	69	170	10000000	1
10132	Tetryl	479-45-8	84	U	84	170	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	55	U	55	170	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	55	U	55	170	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	3,000		660	1,700		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9		1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.9		1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9		1
10225	PCB-1248	12672-29-6	1.4	J	0.36	1.9		1
10225	PCB-1254	11097-69-1	1.1	J	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.88	J	0.36	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	550		1
10501	Isopropanol	67-63-0	110	U	110	550		1
10501	Methanol	67-56-1	140	J	110	550		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	3.9		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	3.9		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	3.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,600		5.43	21.6		1
07914	Boron	7440-42-8	5.74		0.961	5.40		1
01650	Calcium	7440-70-2	3,910		6.62	21.6		1
01654	Iron	7439-89-6	19,900		5.09	21.6		1
01656	Lithium	7439-93-2	19.5		0.24	2.2		1
01657	Magnesium	7439-95-4	3,980		2.74	10.8		1
06958	Manganese	7439-96-5	251		0.0842	0.540		1
10145	Phosphorus	7723-14-0	310		0.605	10.8		1
01662	Potassium	7440-09-7	2,560		19.4	54.0		1
01667	Sodium	7440-23-5	175		40.3	108		1
07968	Strontium	7440-24-6	22.7		0.0669	0.540		1
06969	Tin	7440-31-5	2.43	J	1.08	10.8		1
06970	Titanium	7440-32-6	1,210		0.821	2.16		2
10146	Zirconium	7440-67-7	2.75	J	0.907	5.40		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.132	J	0.0642	0.214		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.29		0.0642	0.428		2
06126	Barium	7440-39-3	132		0.115	0.428		2
06127	Beryllium	7440-41-7	0.814		0.0171	0.107		2
06128	Cadmium	7440-43-9	0.128		0.0385	0.107		2
06131	Chromium	7440-47-3	28.0		0.128	0.428		2
06132	Cobalt	7440-48-4	7.08		0.0214	0.107		2
06133	Copper	7440-50-8	10.8		0.0706	0.428		2
06135	Lead	7439-92-1	7.95		0.0111	0.214		2
06138	Molybdenum	7439-98-7	1.16		0.0535	0.107		2
06139	Nickel	7440-02-0	14.5		0.107	0.428		2
06141	Selenium	7782-49-2	0.185	J	0.0428	0.428		2
06142	Silver	7440-22-4	0.0588	J	0.0128	0.107		2
06145	Thallium	7440-28-0	0.379		0.0321	0.107		2
06148	Vanadium	7440-62-2	52.7		0.0235	0.107		2
06149	Zinc	7440-66-6	90.9		0.599	3.21		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0043	J	0.0031	0.108		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.9		0.88	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2	J	0.88	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9	U	9.9	33.0		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.55		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	395		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.44		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	9.2		0.50	0.50		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0791 SDG#: DE037-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-007-SA5C-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 06:55	Laura M Krieger	1
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 05:24	Sara E Johnson	22.85
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:16	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 17:13	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/05/2011 16:29	Timothy J Trees	2
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 03:05	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 04:16	Linda M Hartenstine	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 19:33	Marie D John	23.85
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:52	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 06:01	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 23:46	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 04:21	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0791 SDG#: DE037-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 22:37	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 17:01	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:03	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:33	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 17:57	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:38	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 17:57	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 17:57	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 17:57	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:54	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 15:28	Ashley M Adams	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163877
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0791 SDG#: DE037-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 15:28	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 03:32	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 00:27	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:12	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163878
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S7505 SDG#: DE037-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	530		1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U	180	530		1
04688	Benzyl alcohol	100-51-6	180	U	180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180		1
04688	4-Chloroaniline	106-47-8	71	U	71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530		1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	35	U	35	180		1
04688	4-Methylphenol	106-44-5	35	U	35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	35	U	35	180		1
04688	4-Nitroaniline	100-01-6	71	U	71	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	530		1
04688	Phenol	108-95-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163878
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S7505 SDG#: DE037-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8		1
10138	Anthracene	120-12-7	0.49	J	0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	4.9		0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	5.6		0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	10		0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	4.2		0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	4.1		0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19		1
10138	Di-n-butylphthalate	84-74-2	8.2	J	6.4	19		1
10138	Chrysene	218-01-9	8.7		0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.78	J	0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	6.4	19		1
10138	Fluoranthene	206-44-0	12		0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.5		0.71	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8		1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19		1
10138	Phenanthrene	85-01-8	4.3		0.71	1.8		1
10138	Pyrene	129-00-0	9.8		0.71	1.8		1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8		1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6		1
10401	2,4-DB	94-82-6	6.8	U	6.8	6.8		1
10401	Dicamba	1918-00-9	0.94	J	0.43	1.3		1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.6		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8		1
10401	MCPA	94-74-6	81	U	81	270		1
10401	MCPP (Mecoprop)	93-65-2	280		80	270		1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18		1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163878
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S7505 SDG#: DE037-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18		1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18		1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18		1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6		1
01363	p,p-DDD	72-54-8	0.070	U	0.070	0.36		1
01363	p,p-DDE	72-55-9	0.070	U	0.070	0.36		1
01363	p,p-DDT	50-29-3	0.070	U	0.070	0.36		1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18		1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36		1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18		1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36		1
01363	Endrin	72-20-8	0.070	U	0.070	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.070	U	0.070	0.36		1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36		1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.036	U	0.036	0.18		1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8		1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36		1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0		1
	The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5		1
10225	Aroclor 5460	11126-42-4	2.9	J	1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8		1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8		1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8		1
10225	PCB-1248	12672-29-6	2.6		0.35	1.8		1
10225	PCB-1254	11097-69-1	5.1		0.35	1.8		1
10225	PCB-1260	11096-82-5	3.5		0.35	1.8		1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163878
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S7505 SDG#: DE037-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals		**SW-846 6010B**	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,600		5.30	21.1		1
07914	Boron	7440-42-8	3.61	J	0.938	5.27		1
01650	Calcium	7440-70-2	3,640		6.46	21.1		1
01654	Iron	7439-89-6	24,500		4.97	21.1		1
01656	Lithium	7439-93-2	26.6		0.23	2.1		1
01657	Magnesium	7439-95-4	5,230		2.68	10.5		1
06958	Manganese	7439-96-5	337		0.0822	0.527		1
10145	Phosphorus	7723-14-0	509		0.590	10.5		1
01662	Potassium	7440-09-7	3,410		19.0	52.7		1
01667	Sodium	7440-23-5	119		39.3	105		1
07968	Strontium	7440-24-6	18.5		0.0654	0.527		1
06969	Tin	7440-31-5	2.61	J	1.05	10.5		1
06970	Titanium	7440-32-6	1,330		0.801	2.11		2
10146	Zirconium	7440-67-7	2.25	J	0.886	5.27		1
		SW-846 6020	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.193	J	0.0626	0.209		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.68		0.0626	0.418		2
06126	Barium	7440-39-3	151		0.113	0.418		2
06127	Beryllium	7440-41-7	0.777		0.0167	0.104		2
06128	Cadmium	7440-43-9	0.173		0.0376	0.104		2
06131	Chromium	7440-47-3	28.5		0.125	0.418		2
06132	Cobalt	7440-48-4	8.89		0.0209	0.104		2
06133	Copper	7440-50-8	15.1		0.0689	0.418		2
06135	Lead	7439-92-1	10.0		0.0109	0.209		2
06138	Molybdenum	7439-98-7	0.843		0.0522	0.104		2
06139	Nickel	7440-02-0	16.9		0.104	0.418		2
06141	Selenium	7782-49-2	0.199	J	0.0418	0.418		2
06142	Silver	7440-22-4	0.173		0.0125	0.104		2
06145	Thallium	7440-28-0	0.378		0.0313	0.104		2
06148	Vanadium	7440-62-2	52.3		0.0230	0.104		2
06149	Zinc	7440-66-6	127		0.585	3.13		2
		SW-846 7471A	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0030	U	0.0030	0.105		1
Wet Chemistry		**EPA 300.0**	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.7		0.85	1.1		1
		EPA 314.0	**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	31.9		1
		SW-846 7199	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163878
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S7505 SDG#: DE037-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		mg/kg		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.46	J	0.21	1.1		1
	ASTM D1498		mV		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	425		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		Std. Units		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.77		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	6.1		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011	03:31	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010	04:51	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010	09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010	09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010	01:42	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011	01:23	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010	04:39	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010	14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010	07:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010	01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010	20:37	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010	20:37	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010	20:37	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163878
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S7505 SDG#: DE037-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:14	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:37	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:00	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:40	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:00	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:00	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:00	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:55	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 15:42	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 03:56	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10364243201A	01/04/2011 00:51	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0705 SDG#: DE037-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	540		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	540		1
04688	Benzyl alcohol	100-51-6	180	U	180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	72	U	72	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540		1
04688	2,4-Dinitrophenol	51-28-5	720	U	720	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	72	U	72	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	72	U	72	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	540		1
04688	Phenol	108-95-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0705 SDG#: DE037-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	1.7	J	0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.8	J	0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	3.8		0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.3	J	0.72	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.4	J	0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	19		1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	19		1
10138	Chrysene	218-01-9	3.1		0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	19		1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.0	J	6.5	19		1
10138	Fluoranthene	206-44-0	3.7		0.72	1.8		1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.2	J	0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.72	U	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72	U	0.72	1.8		1
10138	Naphthalene	91-20-3	0.72	U	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	19		1
10138	Phenanthrene	85-01-8	1.4	J	0.72	1.8		1
10138	Pyrene	129-00-0	3.0		0.72	1.8		1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9		1
10401	Dalapon	75-99-0	4.7	U	4.7	9.7		1
10401	2,4-DB	94-82-6	6.9	U	6.9	6.9		1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3		1
10401	Dinoseb	88-85-7	0.86	U	0.86	2.6		1
10401	2,4-DP (Dichlorprop)	120-36-5	1.7	U	1.7	1.8		1
10401	MCPA	94-74-6	520	U	520	520		1
10401	MCPP (Mecoprop)	93-65-2	230	U	230	270		1
10401	2,4,5-T	93-76-5	0.088	U	0.088	0.18		1
10401	2,4,5-TP	93-72-1	0.081	U	0.081	0.18		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0705 SDG#: DE037-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPP and MCPA. Due to interfering peaks on the chromatogram, the values reported for 2,4-DP and 2,4-DB represent the lowest reporting limits attainable.							
Perchlorate	**SW-846 6850 1/2007**		ug/kg		ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate EPA 6850	14797-73-0	2.3	U	2.3	5.4		1
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.071	U	0.071	0.18		1
01363	Alpha BHC	319-84-6	0.037	U	0.037	0.18		1
01363	Beta BHC	319-85-7	0.63		0.065	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.037	U	0.037	0.18		1
01363	Chlordane	57-74-9	0.86	U	0.86	3.7		1
01363	p,p-DDD	72-54-8	2.6	U	2.6	2.6		1
01363	p,p-DDE	72-55-9	0.071	U	0.071	0.37		1
01363	p,p-DDT	50-29-3	2.1	U	2.1	2.1		1
01363	Delta BHC	319-86-8	0.31		0.039	0.18		1
01363	Dieldrin	60-57-1	0.68	U	0.68	0.68		1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18		1
01363	Endosulfan II	33213-65-9	0.62	U	0.62	0.62		1
01363	Endosulfan Sulfate	1031-07-8	0.071	U	0.071	0.37		1
01363	Endrin	72-20-8	0.071	U	0.071	0.37		1
01363	Endrin Aldehyde	7421-93-4	0.46	U	0.46	0.46		1
01363	Endrin Ketone	53494-70-5	0.071	U	0.071	0.37		1
01363	Heptachlor	76-44-8	0.065	U	0.065	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.20	U	0.20	0.20		1
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8		1
01363	Mirex	2385-85-5	0.39	U	0.39	0.39		1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.1		1
	The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.3	J	1.1	3.6		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0705 SDG#: DE037-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.8		1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.8		1
10225	PCB-1232	11141-16-5	0.56	U	0.56	1.8		1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.8		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.8		1
10225	PCB-1254	11097-69-1	2.4		0.36	1.8		1
10225	PCB-1260	11096-82-5	1.4	J	0.36	1.8		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.8		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.8		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,300		5.31	21.1		1
07914	Boron	7440-42-8	2.83	J	0.939	5.28		1
01650	Calcium	7440-70-2	3,660		6.47	21.1		1
01654	Iron	7439-89-6	25,000		4.97	21.1		1
01656	Lithium	7439-93-2	34.4		0.23	2.1		1
01657	Magnesium	7439-95-4	5,490		2.68	10.6		1
06958	Manganese	7439-96-5	298		0.0823	0.528		1
10145	Phosphorus	7723-14-0	517		0.591	10.6		1
01662	Potassium	7440-09-7	2,400		19.0	52.8		1
01667	Sodium	7440-23-5	90.4	J	39.4	106		1
07968	Strontium	7440-24-6	17.6		0.0654	0.528		1
06969	Tin	7440-31-5	2.62	J	1.06	10.6		1
06970	Titanium	7440-32-6	1,370		0.802	2.11		2
10146	Zirconium	7440-67-7	1.35	J	0.886	5.28		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.215		0.0633	0.211		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.71		0.0633	0.422		2
06126	Barium	7440-39-3	97.9		0.114	0.422		2
06127	Beryllium	7440-41-7	0.636		0.0169	0.106		2
06128	Cadmium	7440-43-9	0.130		0.0380	0.106		2
06131	Chromium	7440-47-3	24.4		0.127	0.422		2
06132	Cobalt	7440-48-4	6.67		0.0211	0.106		2
06133	Copper	7440-50-8	12.4		0.0697	0.422		2
06135	Lead	7439-92-1	6.50		0.0110	0.211		2
06138	Molybdenum	7439-98-7	0.538		0.0528	0.106		2
06139	Nickel	7440-02-0	15.7		0.106	0.422		2
06141	Selenium	7782-49-2	0.0944	J	0.0422	0.422		2
06142	Silver	7440-22-4	0.0576	J	0.0127	0.106		2
06145	Thallium	7440-28-0	0.332		0.0317	0.106		2
06148	Vanadium	7440-62-2	45.2		0.0232	0.106		2
06149	Zinc	7440-66-6	84.3		0.591	3.17		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0705 SDG#: DE037-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 7471A**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0036	J	0.0029	0.102		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5		0.86	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7	U	9.7	32.3		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	411		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.37		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	7.1		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 03:56	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 05:23	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010 03:05	John W Perkins	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0705 SDG#: DE037-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103490017A	12/20/2010 17:44	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011 01:37	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 04:58	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010 14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010 01:40	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103490017A	12/16/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:17	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:41	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:03	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:45	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:03	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:03	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:03	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 05:58	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163879
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0705 SDG#: DE037-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 16:24	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 04:44	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 00:59	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	9.2	U	9.2	11		1.29
06192	Benzene	71-43-2	0.14	U	0.14	5.5		1.29
06192	Bromobenzene	108-86-1	0.18	U	0.18	5.5		1.29
06192	Bromochloromethane	74-97-5	0.46	U	0.46	5.5		1.29
06192	Bromodichloromethane	75-27-4	0.11	U	0.11	5.5		1.29
06192	Bromoform	75-25-2	0.55	U	0.55	5.5		1.29
06192	Bromomethane	74-83-9	0.35	U	0.35	5.5		1.29
06192	2-Butanone	78-93-3	1.7	U	1.7	11		1.29
06192	n-Butylbenzene	104-51-8	0.17	U	0.17	5.5		1.29
06192	sec-Butylbenzene	135-98-8	0.08	U	0.08	5.5		1.29
06192	tert-Butylbenzene	98-06-6	0.22	U	0.22	5.5		1.29
06192	Carbon Tetrachloride	56-23-5	0.19	U	0.19	5.5		1.29
06192	Chlorobenzene	108-90-7	0.15	U	0.15	5.5		1.29
06192	Chloroethane	75-00-3	0.18	U	0.18	5.5		1.29
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.41	U	0.41	5.5		1.29
06192	Chloroform	67-66-3	0.17	U	0.17	5.5		1.29
06192	Chloromethane	74-87-3	0.46	U	0.46	5.5		1.29
06192	2-Chlorotoluene	95-49-8	0.19	U	0.19	5.5		1.29
06192	4-Chlorotoluene	106-43-4	0.19	U	0.19	5.5		1.29
06192	Chlorotrifluoroethene	79-38-9	0.69	U	0.69	6.9		1.29
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.97	U	0.97	5.5		1.29
06192	Dibromochloromethane	124-48-1	0.28	U	0.28	5.5		1.29
06192	1,2-Dibromoethane	106-93-4	0.23	U	0.23	5.5		1.29
06192	Dibromomethane	74-95-3	0.33	U	0.33	5.5		1.29
06192	1,2-Dichlorobenzene	95-50-1	0.12	U	0.12	5.5		1.29
06192	1,3-Dichlorobenzene	541-73-1	0.17	U	0.17	5.5		1.29
06192	1,4-Dichlorobenzene	106-46-7	0.22	U	0.22	5.5		1.29
06192	Dichlorodifluoromethane	75-71-8	0.17	U	0.17	5.5		1.29
06192	1,1-Dichloroethane	75-34-3	0.14	U	0.14	5.5		1.29
06192	1,2-Dichloroethane	107-06-2	0.21	U	0.21	5.5		1.29
06192	1,1-Dichloroethene	75-35-4	0.54	U	0.54	5.5		1.29
06192	cis-1,2-Dichloroethene	156-59-2	0.26	U	0.26	5.5		1.29
06192	trans-1,2-Dichloroethene	156-60-5	0.17	U	0.17	5.5		1.29
06192	1,2-Dichloropropane	78-87-5	0.23	U	0.23	5.5		1.29
06192	1,3-Dichloropropane	142-28-9	0.11	U	0.11	5.5		1.29
06192	2,2-Dichloropropane	594-20-7	0.23	U	0.23	5.5		1.29
06192	1,1-Dichloropropene	563-58-6	0.18	U	0.18	5.5		1.29
06192	cis-1,3-Dichloropropene	10061-01-5	0.22	U	0.22	5.5		1.29
06192	trans-1,3-Dichloropropene	10061-02-6	0.23	U	0.23	5.5		1.29
06192	Ethylbenzene	100-41-4	0.08	U	0.08	5.5		1.29
06192	Freon 113	76-13-1	0.15	U	0.15	5.5		1.29
06192	Freon 133a	75-88-7	0.69	U	0.69	6.9		1.29
06192	Hexachlorobutadiene	87-68-3	0.19	U	0.19	5.5		1.29
06192	2-Hexanone	591-78-6	2.2	U	2.2	11		1.29
06192	Isopropylbenzene	98-82-8	0.08	U	0.08	5.5		1.29
06192	p-Isopropyltoluene	99-87-6	0.15	U	0.15	5.5		1.29
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.29	U	0.29	5.5		1.29
06192	4-Methyl-2-pentanone	108-10-1	0.54	U	0.54	11		1.29
06192	Methylene Chloride	75-09-2	1.5	J	0.33	5.5		1.29
06192	n-Propylbenzene	103-65-1	0.1	U	0.1	5.5		1.29

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.14	U	0.14	5.5		1.29
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.15	U	0.15	5.5		1.29
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.32	U	0.32	5.5		1.29
06192	Tetrachloroethene	127-18-4	0.28	U	0.28	5.5		1.29
06192	Toluene	108-88-3	0.11	U	0.11	5.5		1.29
06192	1,2,3-Trichlorobenzene	87-61-6	0.19	U	0.19	5.5		1.29
06192	1,2,4-Trichlorobenzene	120-82-1	0.25	U	0.25	5.5		1.29
06192	1,1,1-Trichloroethane	71-55-6	0.28	U	0.28	5.5		1.29
06192	1,1,2-Trichloroethane	79-00-5	0.37	U	0.37	5.5		1.29
06192	Trichloroethene	79-01-6	0.21	U	0.21	5.5		1.29
06192	Trichlorofluoromethane	75-69-4	0.40	U	0.40	5.5		1.29
06192	1,2,3-Trichloropropane	96-18-4	0.46	U	0.46	5.5		1.29
06192	1,2,4-Trimethylbenzene	95-63-6	0.55	U	0.55	5.5		1.29
06192	1,3,5-Trimethylbenzene	108-67-8	0.14	U	0.14	5.5		1.29
06192	Vinyl Chloride	75-01-4	0.28	U	0.28	5.5		1.29
06192	m+p-Xylene	179601-23-1	0.23	U	0.23	5.5		1.29
06192	o-Xylene	95-47-6	0.23	U	0.23	5.5		1.29
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	6.6	U	6.6	20		31.02
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	108	J	89.3	179		5
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	540		1
04688	Benzyl alcohol	100-51-6	180	U	180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	71	U	71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540		1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	71	U	71	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	540		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	1.0	J	0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.6	J	0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	3.8		0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	2.4		0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.1	J	0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	14	J	6.4	19		1
10138	Di-n-butylphthalate	84-74-2	9.0	J	6.4	19		1
10138	Chrysene	218-01-9	2.8		0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	44		6.4	19		1
10138	Fluoranthene	206-44-0	2.7		0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.99	J	0.71	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8		1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19		1
10138	Phenanthrene	85-01-8	1.3	J	0.71	1.8		1
10138	Pyrene	129-00-0	2.1		0.71	1.8		1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.							
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	2.6	U	2.6	13		305.62
	Reporting limits were raised due to sample foaming.							
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	80	U	80	160	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	54	U	54	160	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	320	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	320	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	54	U	54	160	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	54	U	54	160	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	54	U	54	160	10000000	1
10132	HMX	2691-41-0	130	U	130	400	10000000	1
10132	Nitrobenzene	98-95-3	54	U	54	160	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,200	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	160	10000000	1
10132	3-Nitrotoluene	99-08-1	130	U	130	160	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	160	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,200	10000000	1
10132	RDX	121-82-4	67	U	67	160	10000000	1
10132	Tetryl	479-45-8	82	U	82	160	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	1,3,5-Trinitrobenzene	99-35-4	54	U	54	160	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	54	U	54	160	10000000	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9		1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6		1
10401	2,4-DB	94-82-6	1.6	J	0.66	1.8		1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3		1
10401	Dinoseb	88-85-7	0.86	U	0.86	2.6		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86	U	0.86	1.8		1
10401	MCPA	94-74-6	200	J	81	270		1
10401	MCPP (Mecoprop)	93-65-2	130	J	80	270		1
10401	2,4,5-T	93-76-5	0.093	U	0.093	0.18		1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported.
When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4,5-T.

HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	640	U	640	1,600		1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.071	U	0.071	0.18		1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18		1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.056	U	0.056	0.18		1
01363	Chlordane	57-74-9	0.86	U	0.86	3.6		1
01363	p,p-DDD	72-54-8	1.1	U	1.1	1.1		1
01363	p,p-DDE	72-55-9	1.7	U	1.7	1.7		1
01363	p,p-DDT	50-29-3	1.6	U	1.6	1.6		1
01363	Delta BHC	319-86-8	0.039	U	0.039	0.18		1
01363	Dieldrin	60-57-1	0.61	U	0.61	0.61		1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18		1
01363	Endosulfan II	33213-65-9	0.16	U	0.16	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.071	U	0.071	0.36		1
01363	Endrin	72-20-8	0.071	U	0.071	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.46	U	0.46	0.46		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Endrin Ketone	53494-70-5	0.071	U	0.071	0.36		1
01363	Heptachlor	76-44-8	0.16	U	0.16	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.29	U	0.29	0.29		1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8		1
01363	Mirex	2385-85-5	0.16	U	0.16	0.36		1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.1		1

The surrogate TCX recovery in the LCS is outside the QC limits.
Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	5.4	U	5.4	18		5
10225	Aroclor 5442	12642-23-8	5.4	U	5.4	18		5
10225	Aroclor 5460	11126-42-4	9.7	J	5.4	18		5
10225	PCB-1016	12674-11-2	1.8	U	1.8	9.1		5
10225	PCB-1221	11104-28-2	2.7	U	2.7	9.1		5
10225	PCB-1232	11141-16-5	2.8	U	2.8	9.1		5
10225	PCB-1242	53469-21-9	2.7	U	2.7	9.1		5
10225	PCB-1248	12672-29-6	1.8	U	1.8	9.1		5
10225	PCB-1254	11097-69-1	73		1.8	9.1		5
10225	PCB-1260	11096-82-5	1.8	U	1.8	9.1		5
10225	PCB-1262	37324-23-5	1.8	U	1.8	9.1		5
10225	PCB-1268	11100-14-4	1.8	U	1.8	9.1		5

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	540		1
10501	Isopropanol	67-63-0	110	U	110	540		1
10501	Methanol	67-56-1	110	U	110	540		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.6	U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6	U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6	U	1.6	3.8		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,900		5.29	21.0		1
07914	Boron	7440-42-8	7.47		0.935	5.25		1
01650	Calcium	7440-70-2	23,100		6.44	21.0		1
01654	Iron	7439-89-6	24,800		4.95	21.0		1
01656	Lithium	7439-93-2	22.0		0.23	2.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8505 SDG#: DE037-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,880		2.67	10.5		1
06958	Manganese	7439-96-5	356		0.0820	0.525		1
10145	Phosphorus	7723-14-0	422		0.588	10.5		1
01662	Potassium	7440-09-7	3,390		18.9	52.5		1
01667	Sodium	7440-23-5	259		39.2	105		1
07968	Strontium	7440-24-6	96.6		0.0651	0.525		1
06969	Tin	7440-31-5	2.65	J	1.05	10.5		1
06970	Titanium	7440-32-6	1,310		0.799	2.10		2
10146	Zirconium	7440-67-7	6.16		0.883	5.25		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.470		0.0618	0.206		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.71		0.0618	0.412		2
06126	Barium	7440-39-3	179		0.111	0.412		2
06127	Beryllium	7440-41-7	0.865		0.0165	0.103		2
06128	Cadmium	7440-43-9	0.490		0.0371	0.103		2
06131	Chromium	7440-47-3	53.6		0.124	0.412		2
06132	Cobalt	7440-48-4	9.05		0.0206	0.103		2
06133	Copper	7440-50-8	17.1		0.0680	0.412		2
06135	Lead	7439-92-1	13.3		0.0107	0.206		2
06138	Molybdenum	7439-98-7	10.7		0.0515	0.103		2
06139	Nickel	7440-02-0	22.8		0.103	0.412		2
06141	Selenium	7782-49-2	0.237	J	0.0412	0.412		2
06142	Silver	7440-22-4	0.0715	J	0.0124	0.103		2
06145	Thallium	7440-28-0	0.364		0.0309	0.103		2
06148	Vanadium	7440-62-2	59.0		0.0227	0.103		2
06149	Zinc	7440-66-6	147		0.577	3.09		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.161		0.0030	0.106		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.5		0.86	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.98	J	0.86	1.6		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	32.2		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.66	J	0.21	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.19	U	0.19	0.53		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8505 SDG#: DE037-09

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	397	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	8.67	0.0100	0.0100		1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	6.7	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 07:18	Laura M Krieger	1.29
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 05:44	Sara E Johnson	31.02
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:21	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:43	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:44	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 17:18	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/06/2011 09:49	Timothy J Trees	5
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 04:21	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 05:55	Linda M Hartenstine	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 20:20	Marie D John	305.62

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8505 SDG#: DE037-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:50	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 06:44	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/22/2010 23:56	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010 03:33	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011 02:05	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 05:16	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010 14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010 01:40	Roman Kuropatkin	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103510008A	12/17/2010 22:57	Dustin A Underkoffler	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550026A	12/23/2010 08:47	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103510008A	12/17/2010 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:21	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:44	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:06	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:47	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:06	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163880
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8505 SDG#: DE037-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:06	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:06	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:00	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 16:39	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201A	01/05/2011 16:39	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 05:08	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10364243201A	01/04/2011 01:23	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:13	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8705 SDG#: DE037-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	360		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	550		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8705 SDG#: DE037-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	3.4		0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	2.8		0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	4.8		0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.8	J	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.4	J	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	14	J	6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U	6.6	20		1
10138	Chrysene	218-01-9	3.2		0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U	6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U	6.6	20		1
10138	Fluoranthene	206-44-0	4.0		0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.91	J	0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6	U	6.6	20		1
10138	Phenanthrene	85-01-8	0.73	U	0.73	1.8		1
10138	Pyrene	129-00-0	3.6		0.73	1.8		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9		1
10401	Dalapon	75-99-0	4.8	U	4.8	9.8		1
10401	2,4-DB	94-82-6	2.9		0.68	1.9		1
10401	Dicamba	1918-00-9	0.54	J	0.44	1.3		1
10401	Dinoseb	88-85-7	0.87	U	0.87	2.6		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87	U	0.87	1.9		1
10401	MCPA	94-74-6	400	U	400	400		1
10401	MCPP (Mecoprop)	93-65-2	82	U	82	270		1
10401	2,4,5-T	93-76-5	0.090	U	0.090	0.19		1
10401	2,4,5-TP	93-72-1	0.082	U	0.082	0.19		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8705 SDG#: DE037-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	reported. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPA.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.072	U	0.072	0.18		1
01363	Alpha BHC	319-84-6	0.037	U	0.037	0.18		1
01363	Beta BHC	319-85-7	0.066	U	0.066	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.056	U	0.056	0.18		1
01363	Chlordane	57-74-9	5.0	U	5.0	5.0		1
01363	p,p-DDD	72-54-8	1.5	U	1.5	1.5		1
01363	p,p-DDE	72-55-9	1.4	U	1.4	1.4		1
01363	p,p-DDT	50-29-3	2.1	U	2.1	2.1		1
01363	Delta BHC	319-86-8	0.039	U	0.039	0.18		1
01363	Dieldrin	60-57-1	0.64	U	0.64	0.64		1
01363	Endosulfan I	959-98-8	0.048	U	0.048	0.18		1
01363	Endosulfan II	33213-65-9	0.13	U	0.13	0.37		1
01363	Endosulfan Sulfate	1031-07-8	0.072	U	0.072	0.37		1
01363	Endrin	72-20-8	0.072	U	0.072	0.37		1
01363	Endrin Aldehyde	7421-93-4	0.44	U	0.44	0.44		1
01363	Endrin Ketone	53494-70-5	0.072	U	0.072	0.37		1
01363	Heptachlor	76-44-8	0.21	U	0.21	0.21		1
01363	Heptachlor Epoxide	1024-57-3	0.37	U	0.37	1.8		10
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8		1
01363	Mirex	2385-85-5	0.072	U	0.072	0.37		1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.2		1
	The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. Due to interfering peaks on the chromatogram, the values reported for heptachlor epoxide represent the lowest reporting limits attainable.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.2	U	2.2	7.2		2
10225	Aroclor 5442	12642-23-8	2.2	U	2.2	7.2		2
10225	Aroclor 5460	11126-42-4	5.1	J	2.2	7.2		2
10225	PCB-1016	12674-11-2	0.72	U	0.72	3.7		2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.7		2
10225	PCB-1232	11141-16-5	1.1	U	1.1	3.7		2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.7		2
10225	PCB-1248	12672-29-6	40		0.72	3.7		2
10225	PCB-1254	11097-69-1	16		0.72	3.7		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8705 SDG#: DE037-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1260	11096-82-5	11		0.72	3.7		2
10225	PCB-1262	37324-23-5	0.72	U	0.72	3.7		2
10225	PCB-1268	11100-14-4	0.72	U	0.72	3.7		2
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,800		5.39	21.4		1
07914	Boron	7440-42-8	5.31	J	0.954	5.36		1
01650	Calcium	7440-70-2	18,800		6.57	21.4		1
01654	Iron	7439-89-6	25,400		5.05	21.4		1
01656	Lithium	7439-93-2	24.1		0.24	2.1		1
01657	Magnesium	7439-95-4	5,190		2.72	10.7		1
06958	Manganese	7439-96-5	311		0.0836	0.536		1
10145	Phosphorus	7723-14-0	451		0.600	10.7		1
01662	Potassium	7440-09-7	3,220		19.3	53.6		1
01667	Sodium	7440-23-5	186		40.0	107		1
07968	Strontium	7440-24-6	58.7		0.0664	0.536		1
06969	Tin	7440-31-5	2.61	J	1.07	10.7		1
06970	Titanium	7440-32-6	1,360		0.814	2.14		2
10146	Zirconium	7440-67-7	3.44	J	0.900	5.36		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.405		0.0637	0.212		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.58		0.0637	0.424		2
06126	Barium	7440-39-3	143		0.115	0.424		2
06127	Beryllium	7440-41-7	0.733		0.0170	0.106		2
06128	Cadmium	7440-43-9	0.282		0.0382	0.106		2
06131	Chromium	7440-47-3	30.1		0.127	0.424		2
06132	Cobalt	7440-48-4	7.58		0.0212	0.106		2
06133	Copper	7440-50-8	14.8		0.0700	0.424		2
06135	Lead	7439-92-1	10.9		0.0110	0.212		2
06138	Molybdenum	7439-98-7	1.19		0.0531	0.106		2
06139	Nickel	7440-02-0	19.7		0.106	0.424		2
06141	Selenium	7782-49-2	0.136	J	0.0424	0.424		2
06142	Silver	7440-22-4	0.841		0.0127	0.106		2
06145	Thallium	7440-28-0	0.303		0.0318	0.106		2
06148	Vanadium	7440-62-2	54.1		0.0233	0.106		2
06149	Zinc	7440-66-6	133		0.594	3.18		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0304	J	0.0031	0.107		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.87	U	0.87	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8705 SDG#: DE037-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 314.0**		ug/kg		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.8		1
	SW-846 7199		mg/kg		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.50	J	0.22	1.1		1
	ASTM D1498		mV		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	388		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		Std. Units		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.70		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	8.5		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011	04:46	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010	06:29	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010	09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010	09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010	04:01	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011	02:19	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011	02:33	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010	06:49	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010	14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010	07:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8705 SDG#: DE037-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:24	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:49	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:09	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:49	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:09	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:09	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:09	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:01	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 16:53	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 05:32	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 01:31	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101A	12/16/2010 12:10	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163881
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S8705 SDG#: DE037-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401A	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163882
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S9505 SDG#: DE037-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	530		1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U	180	530		1
04688	Benzyl alcohol	100-51-6	180	U	180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180		1
04688	4-Chloroaniline	106-47-8	70	U	70	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530		1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	35	U	35	180		1
04688	4-Methylphenol	106-44-5	35	U	35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	35	U	35	180		1
04688	4-Nitroaniline	100-01-6	70	U	70	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	530		1
04688	Phenol	108-95-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163882
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S9505 SDG#: DE037-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8		1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	2.2		0.70	1.8		1
10138	Benzo(a)pyrene	50-32-8	3.0		0.70	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	5.6		0.70	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.9		0.70	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.9		0.70	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19		1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19		1
10138	Chrysene	218-01-9	3.4		0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U	0.70	1.8		1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19		1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	16	J	6.3	19		1
10138	Fluoranthene	206-44-0	3.2		0.70	1.8		1
10138	Fluorene	86-73-7	0.70	U	0.70	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.4	J	0.70	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.70	U	0.70	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.70	U	0.70	1.8		1
10138	Naphthalene	91-20-3	0.70	U	0.70	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19		1
10138	Phenanthrene	85-01-8	1.2	J	0.70	1.8		1
10138	Pyrene	129-00-0	2.9		0.70	1.8		1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8		1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5		1
10401	2,4-DB	94-82-6	3.9		0.65	1.8		1
10401	Dicamba	1918-00-9	0.55	J	0.42	1.3		1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8		1
10401	MCPA	94-74-6	530		80	260		1
10401	MCPP (Mecoprop)	93-65-2	79	U	79	260		1
10401	2,4,5-T	93-76-5	0.086	U	0.086	0.18		1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163882
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S9505 SDG#: DE037-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17		1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.17		1
01363	Beta BHC	319-85-7	0.063	U	0.063	0.17		1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.17		1
01363	Chlordane	57-74-9	0.84	U	0.84	3.6		1
01363	p,p-DDD	72-54-8	0.20	U	0.20	0.36		1
01363	p,p-DDE	72-55-9	0.069	U	0.069	0.36		1
01363	p,p-DDT	50-29-3	0.23	U	0.23	0.36		1
01363	Delta BHC	319-86-8	0.12	J	0.038	0.17		1
01363	Dieldrin	60-57-1	0.069	U	0.069	0.36		1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17		1
01363	Endosulfan II	33213-65-9	0.069	U	0.069	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.069	U	0.069	0.36		1
01363	Endrin	72-20-8	0.069	U	0.069	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.069	U	0.069	0.36		1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.36		1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17		1
01363	Heptachlor Epoxide	1024-57-3	0.036	U	0.036	0.17		1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.7		1
01363	Mirex	2385-85-5	0.069	U	0.069	0.36		1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9		1
	The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.1	U	2.1	6.9		2
10225	Aroclor 5442	12642-23-8	2.1	U	2.1	6.9		2
10225	Aroclor 5460	11126-42-4	37		2.1	6.9		2
10225	PCB-1016	12674-11-2	0.69	U	0.69	3.6		2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.6		2
10225	PCB-1232	11141-16-5	1.1	U	1.1	3.6		2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.6		2
10225	PCB-1248	12672-29-6	0.69	U	0.69	3.6		2
10225	PCB-1254	11097-69-1	9.2		0.69	3.6		2
10225	PCB-1260	11096-82-5	5.2		0.69	3.6		2
10225	PCB-1262	37324-23-5	0.69	U	0.69	3.6		2
10225	PCB-1268	11100-14-4	0.69	U	0.69	3.6		2
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163882
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S9505 SDG#: DE037-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,600		5.24	20.8		1
07914	Boron	7440-42-8	4.36	J	0.928	5.21		1
01650	Calcium	7440-70-2	6,280		6.39	20.8		1
01654	Iron	7439-89-6	21,900		4.91	20.8		1
01656	Lithium	7439-93-2	19.3		0.23	2.1		1
01657	Magnesium	7439-95-4	4,420		2.65	10.4		1
06958	Manganese	7439-96-5	314		0.0813	0.521		1
10145	Phosphorus	7723-14-0	441		0.584	10.4		1
01662	Potassium	7440-09-7	3,440		18.8	52.1		1
01667	Sodium	7440-23-5	106		38.9	104		1
07968	Strontium	7440-24-6	28.4		0.0646	0.521		1
06969	Tin	7440-31-5	1.04	U	1.04	10.4		1
06970	Titanium	7440-32-6	1,080		0.792	2.08		2
10146	Zirconium	7440-67-7	1.88	J	0.875	5.21		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.330		0.0607	0.202		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.12		0.0607	0.405		2
06126	Barium	7440-39-3	162		0.109	0.405		2
06127	Beryllium	7440-41-7	0.736		0.0162	0.101		2
06128	Cadmium	7440-43-9	0.278		0.0364	0.101		2
06131	Chromium	7440-47-3	27.3		0.121	0.405		2
06132	Cobalt	7440-48-4	7.66		0.0202	0.101		2
06133	Copper	7440-50-8	14.9		0.0668	0.405		2
06135	Lead	7439-92-1	10.9		0.0105	0.202		2
06138	Molybdenum	7439-98-7	1.17		0.0506	0.101		2
06139	Nickel	7440-02-0	17.1		0.101	0.405		2
06141	Selenium	7782-49-2	0.159	J	0.0405	0.405		2
06142	Silver	7440-22-4	0.0526	J	0.0121	0.101		2
06145	Thallium	7440-28-0	0.348		0.0304	0.101		2
06148	Vanadium	7440-62-2	51.8		0.0223	0.101		2
06149	Zinc	7440-66-6	126		0.567	3.04		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.146		0.0029	0.102		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.3		0.84	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.6		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.52	J	0.21	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163882
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S9505 SDG#: DE037-11

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	393	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	8.14	0.0100	0.0100		1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.0	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011	05:11	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010	07:05	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010	09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010	09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010	04:28	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011	02:47	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010	07:08	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010	14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010	07:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010	01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010	20:52	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010	20:52	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010	20:52	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010	20:52	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010	20:52	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010	20:52	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163882
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S9505 SDG#: DE037-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:28	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:52	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:13	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:02	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201A	01/05/2011 17:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201A	01/04/2011 05:56	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10364243201A	01/04/2011 01:55	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201A	01/04/2011 13:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201A	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S9105 SDG#: DE037-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	540		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	540		1
04688	Benzyl alcohol	100-51-6	180	U	180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540		1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	540		1
04688	Phenol	108-95-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S9105 SDG#: DE037-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	1.1	J	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.6	J	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	3.4		0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.5	J	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	20		1
10138	Chrysene	218-01-9	2.8		0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	25		6.5	20		1
10138	Fluoranthene	206-44-0	1.8		0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U	0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.74	J	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20		1
10138	Phenanthrene	85-01-8	1.1	J	0.73	1.8		1
10138	Pyrene	129-00-0	2.0		0.73	1.8		1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9		1
10401	Dalapon	75-99-0	4.8	U	4.8	9.8		1
10401	2,4-DB	94-82-6	0.67	U	0.67	1.8		1
10401	Dicamba	1918-00-9	0.44	U	0.44	1.3		1
10401	Dinoseb	88-85-7	0.87	U	0.87	2.6		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87	U	0.87	1.8		1
10401	MCPA	94-74-6	120	U	120	270		1
10401	MCPP (Mecoprop)	93-65-2	230	U	230	270		1
10401	2,4,5-T	93-76-5	0.089	U	0.089	0.18		1
10401	2,4,5-TP	93-72-1	0.082	U	0.082	0.18		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S9105 SDG#: DE037-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPP and MCPA.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.072	U	0.072	0.18		1
01363	Alpha BHC	319-84-6	0.037	U	0.037	0.18		1
01363	Beta BHC	319-85-7	0.065	U	0.065	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.037	U	0.037	0.18		1
01363	Chlordane	57-74-9	0.87	U	0.87	3.7		1
01363	p,p-DDD	72-54-8	0.072	U	0.072	0.37		1
01363	p,p-DDE	72-55-9	0.072	U	0.072	0.37		1
01363	p,p-DDT	50-29-3	0.50	U	0.50	0.50		1
01363	Delta BHC	319-86-8	0.039	U	0.039	0.18		1
01363	Dieldrin	60-57-1	0.079	U	0.079	0.37		1
01363	Endosulfan I	959-98-8	0.048	U	0.048	0.18		1
01363	Endosulfan II	33213-65-9	0.13	U	0.13	0.37		1
01363	Endosulfan Sulfate	1031-07-8	0.072	U	0.072	0.37		1
01363	Endrin	72-20-8	0.53		0.072	0.37		1
01363	Endrin Aldehyde	7421-93-4	0.20	U	0.20	0.37		1
01363	Endrin Ketone	53494-70-5	0.072	U	0.072	0.37		1
01363	Heptachlor	76-44-8	0.065	U	0.065	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.19	U	0.19	0.19		1
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8		1
01363	Mirex	2385-85-5	0.12	U	0.12	0.37		1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.2		1
	The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.2	U	2.2	7.2		2
10225	Aroclor 5442	12642-23-8	2.2	U	2.2	7.2		2
10225	Aroclor 5460	11126-42-4	2.8	J	2.2	7.2		2
10225	PCB-1016	12674-11-2	0.72	U	0.72	3.7		2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.7		2
10225	PCB-1232	11141-16-5	1.1	U	1.1	3.7		2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.7		2
10225	PCB-1248	12672-29-6	0.72	U	0.72	3.7		2
10225	PCB-1254	11097-69-1	38		0.72	3.7		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S9105 SDG#: DE037-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1260	11096-82-5	0.72	U	0.72	3.7		2
10225	PCB-1262	37324-23-5	0.72	U	0.72	3.7		2
10225	PCB-1268	11100-14-4	0.72	U	0.72	3.7		2
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,900		5.26	20.9		1
07914	Boron	7440-42-8	7.01		0.931	5.23		1
01650	Calcium	7440-70-2	15,700		6.41	20.9		1
01654	Iron	7439-89-6	29,400		9.86	41.9		2
01656	Lithium	7439-93-2	31.8		0.23	2.1		1
01657	Magnesium	7439-95-4	7,030		2.66	10.5		1
06958	Manganese	7439-96-5	350		0.0816	0.523		1
10145	Phosphorus	7723-14-0	518		0.586	10.5		1
01662	Potassium	7440-09-7	4,880		18.8	52.3		1
01667	Sodium	7440-23-5	204		39.0	105		1
07968	Strontium	7440-24-6	43.1		0.0649	0.523		1
06969	Tin	7440-31-5	2.86	J	1.05	10.5		1
06970	Titanium	7440-32-6	1,560		0.795	2.09		2
10146	Zirconium	7440-67-7	3.18	J	0.879	5.23		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.437		0.0634	0.211		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	10.8		0.0634	0.423		2
06126	Barium	7440-39-3	175		0.114	0.423		2
06127	Beryllium	7440-41-7	1.01		0.0169	0.106		2
06128	Cadmium	7440-43-9	0.271		0.0380	0.106		2
06131	Chromium	7440-47-3	50.2		0.127	0.423		2
06132	Cobalt	7440-48-4	12.3		0.0211	0.106		2
06133	Copper	7440-50-8	19.2		0.0697	0.423		2
06135	Lead	7439-92-1	15.2		0.0110	0.211		2
06138	Molybdenum	7439-98-7	1.31		0.0528	0.106		2
06139	Nickel	7440-02-0	25.9		0.106	0.423		2
06141	Selenium	7782-49-2	0.334	J	0.0423	0.423		2
06142	Silver	7440-22-4	0.0585	J	0.0127	0.106		2
06145	Thallium	7440-28-0	0.531		0.0317	0.106		2
06148	Vanadium	7440-62-2	93.5		0.0232	0.106		2
06149	Zinc	7440-66-6	182		0.592	3.17		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0218	J	0.0030	0.105		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.0		0.87	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S9105 SDG#: DE037-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 314.0**		ug/kg		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.6		1
	SW-846 7199		mg/kg		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.47	J	0.22	1.1		1
	ASTM D1498		mV		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	398		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		Std. Units		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.37		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	8.1		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011	05:36	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010	07:39	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010	09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010	09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010	04:56	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011	03:01	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010	07:26	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010	14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010	07:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S9105 SDG#: DE037-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/22/2010 03:32	Tara L Snyder	2
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:32	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 20:56	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:52	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:03	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201B	01/05/2011 17:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201B	01/04/2011 06:20	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10364243201A	01/04/2011 02:11	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201B	01/04/2011 14:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201B	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163883
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S9105 SDG#: DE037-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0345 SDG#: DE037-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.7	U	6.7	8.0		0.93
06192	Benzene	71-43-2	0.10	U	0.10	4.0		0.93
06192	Bromobenzene	108-86-1	0.13	U	0.13	4.0		0.93
06192	Bromochloromethane	74-97-5	0.33	U	0.33	4.0		0.93
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.0		0.93
06192	Bromoform	75-25-2	0.40	U	0.40	4.0		0.93
06192	Bromomethane	74-83-9	0.25	U	0.25	4.0		0.93
06192	2-Butanone	78-93-3	1.2	U	1.2	8.0		0.93
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.0		0.93
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.0		0.93
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	4.0		0.93
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	4.0		0.93
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.0		0.93
06192	Chloroethane	75-00-3	0.13	U	0.13	4.0		0.93
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30	U	0.30	4.0		0.93
06192	Chloroform	67-66-3	0.13	J	0.12	4.0		0.93
06192	Chloromethane	74-87-3	0.33	U	0.33	4.0		0.93
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	4.0		0.93
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	4.0		0.93
06192	Chlorotrifluoroethene	79-38-9	0.50	U	0.50	5.0		0.93
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.70	U	0.70	4.0		0.93
06192	Dibromochloromethane	124-48-1	0.20	U	0.20	4.0		0.93
06192	1,2-Dibromoethane	106-93-4	0.17	U	0.17	4.0		0.93
06192	Dibromomethane	74-95-3	0.24	U	0.24	4.0		0.93
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.0		0.93
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.0		0.93
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	4.0		0.93
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.0		0.93
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.0		0.93
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	4.0		0.93
06192	1,1-Dichloroethene	75-35-4	0.39	U	0.39	4.0		0.93
06192	cis-1,2-Dichloroethene	156-59-2	0.19	U	0.19	4.0		0.93
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.0		0.93
06192	1,2-Dichloropropane	78-87-5	0.17	U	0.17	4.0		0.93
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.0		0.93
06192	2,2-Dichloropropane	594-20-7	0.17	U	0.17	4.0		0.93
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	4.0		0.93
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	4.0		0.93
06192	trans-1,3-Dichloropropene	10061-02-6	0.17	U	0.17	4.0		0.93
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.0		0.93
06192	Freon 113	76-13-1	0.11	U	0.11	4.0		0.93
06192	Freon 133a	75-88-7	0.50	U	0.50	5.0		0.93
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	4.0		0.93
06192	2-Hexanone	591-78-6	1.6	U	1.6	8.0		0.93
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.0		0.93
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.0		0.93
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21	U	0.21	4.0		0.93
06192	4-Methyl-2-pentanone	108-10-1	0.39	U	0.39	8.0		0.93
06192	Methylene Chloride	75-09-2	2.4	J	0.24	4.0		0.93
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.0		0.93

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0345 SDG#: DE037-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.10	U	0.10	4.0		0.93
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.0		0.93
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23	U	0.23	4.0		0.93
06192	Tetrachloroethene	127-18-4	0.20	U	0.20	4.0		0.93
06192	Toluene	108-88-3	0.08	U	0.08	4.0		0.93
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	4.0		0.93
06192	1,2,4-Trichlorobenzene	120-82-1	0.18	U	0.18	4.0		0.93
06192	1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	4.0		0.93
06192	1,1,2-Trichloroethane	79-00-5	0.27	U	0.27	4.0		0.93
06192	Trichloroethene	79-01-6	0.15	U	0.15	4.0		0.93
06192	Trichlorofluoromethane	75-69-4	0.29	U	0.29	4.0		0.93
06192	1,2,3-Trichloropropane	96-18-4	0.33	U	0.33	4.0		0.93
06192	1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	4.0		0.93
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.0		0.93
06192	Vinyl Chloride	75-01-4	0.20	U	0.20	4.0		0.93
06192	m+p-Xylene	179601-23-1	0.17	U	0.17	4.0		0.93
06192	o-Xylene	95-47-6	0.17	U	0.17	4.0		0.93
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.9	U	4.9	15		22.69
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	93.9		35.9	71.8		2
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	540		1
04688	Benzyl alcohol	100-51-6	180	U	180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	72	U	72	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540		1
04688	2,4-Dinitrophenol	51-28-5	720	U	720	2,200		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0345 SDG#: DE037-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	360		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	72	U	72	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	72	U	72	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	540		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	1.3	J	0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.8		0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	2.9		0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.90	J	0.72	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	J	0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	19		1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	19		1
10138	Chrysene	218-01-9	4.0		0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	19		1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	19		1
10138	Fluoranthene	206-44-0	1.7	J	0.72	1.8		1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	U	0.72	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0345 SDG#: DE037-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.72	U	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72	U	0.72	1.8		1
10138	Naphthalene	91-20-3	0.72	U	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	19		1
10138	Phenanthrene	85-01-8	0.72	U	0.72	1.8		1
10138	Pyrene	129-00-0	2.4		0.72	1.8		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.2		27.29
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	81	U	81	160	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	54	U	54	160	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	320	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	320	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	54	U	54	160	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	54	U	54	160	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	54	U	54	160	10000000	1
10132	HMX	2691-41-0	130	U	130	400	10000000	1
10132	Nitrobenzene	98-95-3	54	U	54	160	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,200	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	160	10000000	1
10132	3-Nitrotoluene	99-08-1	130	U	130	160	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	160	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,200	10000000	1
10132	RDX	121-82-4	67	U	67	160	10000000	1
10132	Tetryl	479-45-8	82	U	82	160	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	54	U	54	160	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	54	U	54	160	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0345 SDG#: DE037-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	650	U	650	1,600		1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.3	U	2.3	5.4		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.8		1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.8		1
10225	PCB-1232	11141-16-5	0.56	U	0.56	1.8		1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.8		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.8		1
10225	PCB-1254	11097-69-1	1.3	J	0.36	1.8		1
10225	PCB-1260	11096-82-5	0.61	J	0.36	1.8		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.8		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.8		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	540		1
10501	Isopropanol	67-63-0	110	U	110	540		1
10501	Methanol	67-56-1	110	J	110	540		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.6	U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6	U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6	U	1.6	3.8		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,600		5.42	21.6		1
07914	Boron	7440-42-8	4.64	J	0.959	5.39		1
01650	Calcium	7440-70-2	3,440		6.61	21.6		1
01654	Iron	7439-89-6	20,400		5.08	21.6		1
01656	Lithium	7439-93-2	19.3		0.24	2.2		1
01657	Magnesium	7439-95-4	3,910		2.74	10.8		1
06958	Manganese	7439-96-5	303		0.0841	0.539		1
10145	Phosphorus	7723-14-0	349		0.603	10.8		1
01662	Potassium	7440-09-7	2,660		19.4	53.9		1
01667	Sodium	7440-23-5	181		40.2	108		1
07968	Strontium	7440-24-6	18.7		0.0668	0.539		1
06969	Tin	7440-31-5	2.50	J	1.08	10.8		1
06970	Titanium	7440-32-6	1,150		0.819	2.16		2
10146	Zirconium	7440-67-7	1.44	J	0.905	5.39		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0345 SDG#: DE037-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.174	J	0.0622	0.207		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.50		0.0622	0.414		2
06126	Barium	7440-39-3	119		0.112	0.414		2
06127	Beryllium	7440-41-7	0.612		0.0166	0.104		2
06128	Cadmium	7440-43-9	0.0875	J	0.0373	0.104		2
06131	Chromium	7440-47-3	21.3		0.124	0.414		2
06132	Cobalt	7440-48-4	7.07		0.0207	0.104		2
06133	Copper	7440-50-8	10.7		0.0684	0.414		2
06135	Lead	7439-92-1	6.10		0.0108	0.207		2
06138	Molybdenum	7439-98-7	0.780		0.0518	0.104		2
06139	Nickel	7440-02-0	12.8		0.104	0.414		2
06141	Selenium	7782-49-2	0.177	J	0.0414	0.414		2
06142	Silver	7440-22-4	0.0366	J	0.0124	0.104		2
06145	Thallium	7440-28-0	0.350		0.0311	0.104		2
06148	Vanadium	7440-62-2	45.3		0.0228	0.104		2
06149	Zinc	7440-66-6	89.1		0.580	3.11		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0131	J	0.0030	0.105		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5		0.86	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	3.6		0.86	1.6		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7	U	9.7	32.3		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.82	J	0.22	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.19	U	0.19	0.53		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	391		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.70		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0345 SDG#: DE037-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	7.2	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-003-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 07:40	Laura M Krieger	0.93
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 06:04	Sara E Johnson	22.69
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:28	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:44	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:44	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 17:24	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/05/2011 14:13	Timothy J Trees	2
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 06:02	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 08:12	Linda M Hartenstine	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 20:57	Marie D John	27.29
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:49	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 07:26	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 00:15	James H Place	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	110040016A	01/05/2011 15:30	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 07:45	Lindsey K Lafferty	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0345 SDG#: DE037-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	110040016A	01/05/2011 09:45	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 22:52	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 14:46	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:35	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 21:00	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:19	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:54	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:19	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:19	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:04	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163884
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0345 SDG#: DE037-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201B	01/05/2011 18:04	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201B	01/05/2011 18:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201B	01/04/2011 07:32	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 02:19	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:15	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201B	01/04/2011 14:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201B	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.9	U	6.9	8.3		0.96
06192	Benzene	71-43-2	0.10	U	0.10	4.1		0.96
06192	Bromobenzene	108-86-1	0.13	U	0.13	4.1		0.96
06192	Bromochloromethane	74-97-5	0.34	U	0.34	4.1		0.96
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.1		0.96
06192	Bromoform	75-25-2	0.41	U	0.41	4.1		0.96
06192	Bromomethane	74-83-9	0.26	U	0.26	4.1		0.96
06192	2-Butanone	78-93-3	1.3	U	1.3	8.3		0.96
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.1		0.96
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.1		0.96
06192	tert-Butylbenzene	98-06-6	0.17	U	0.17	4.1		0.96
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	4.1		0.96
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.1		0.96
06192	Chloroethane	75-00-3	0.13	U	0.13	4.1		0.96
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31	U	0.31	4.1		0.96
06192	Chloroform	67-66-3	0.12	U	0.12	4.1		0.96
06192	Chloromethane	74-87-3	0.34	U	0.34	4.1		0.96
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	4.1		0.96
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	4.1		0.96
06192	Chlorotrifluoroethene	79-38-9	0.52	U	0.52	5.2		0.96
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.72	U	0.72	4.1		0.96
06192	Dibromochloromethane	124-48-1	0.21	U	0.21	4.1		0.96
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.1		0.96
06192	Dibromomethane	74-95-3	0.25	U	0.25	4.1		0.96
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.1		0.96
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.1		0.96
06192	1,4-Dichlorobenzene	106-46-7	0.17	U	0.17	4.1		0.96
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.1		0.96
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.1		0.96
06192	1,2-Dichloroethane	107-06-2	0.16	U	0.16	4.1		0.96
06192	1,1-Dichloroethene	75-35-4	0.40	U	0.40	4.1		0.96
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.1		0.96
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.1		0.96
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.1		0.96
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.1		0.96
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.1		0.96
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	4.1		0.96
06192	cis-1,3-Dichloropropene	10061-01-5	0.17	U	0.17	4.1		0.96
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.1		0.96
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.1		0.96
06192	Freon 113	76-13-1	0.11	U	0.11	4.1		0.96
06192	Freon 133a	75-88-7	0.52	U	0.52	5.2		0.96
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	4.1		0.96
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.3		0.96
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.1		0.96
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.1		0.96
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22	U	0.22	4.1		0.96
06192	4-Methyl-2-pentanone	108-10-1	0.40	U	0.40	8.3		0.96
06192	Methylene Chloride	75-09-2	3.0	J	0.25	4.1		0.96
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.1		0.96

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.10	U	0.10	4.1		0.96
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.1		0.96
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24	U	0.24	4.1		0.96
06192	Tetrachloroethene	127-18-4	0.21	U	0.21	4.1		0.96
06192	Toluene	108-88-3	0.08	U	0.08	4.1		0.96
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	4.1		0.96
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.1		0.96
06192	1,1,1-Trichloroethane	71-55-6	0.21	U	0.21	4.1		0.96
06192	1,1,2-Trichloroethane	79-00-5	0.28	U	0.28	4.1		0.96
06192	Trichloroethene	79-01-6	0.16	U	0.16	4.1		0.96
06192	Trichlorofluoromethane	75-69-4	0.30	U	0.30	4.1		0.96
06192	1,2,3-Trichloropropane	96-18-4	0.34	U	0.34	4.1		0.96
06192	1,2,4-Trimethylbenzene	95-63-6	0.41	U	0.41	4.1		0.96
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.1		0.96
06192	Vinyl Chloride	75-01-4	0.21	U	0.21	4.1		0.96
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.1		0.96
06192	o-Xylene	95-47-6	0.18	U	0.18	4.1		0.96
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.6	U	4.6	14		21.59
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	97.1		17.9	35.7		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	540		1
04688	Benzyl alcohol	100-51-6	180	U	180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	71	U	71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540		1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	360		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	71	U	71	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	540		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.71	U	0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.71	U	0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.71	U	0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.71	U	0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.71	U	0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19		1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19		1
10138	Chrysene	218-01-9	0.36	U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19		1
10138	Fluoranthene	206-44-0	0.71	U	0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U	0.71	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8		1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19		1
10138	Phenanthrene	85-01-8	0.71	U	0.71	1.8		1
10138	Pyrene	129-00-0	0.71	U	0.71	1.8		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1		23.06
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	80	U	80	160	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	54	U	54	160	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	320	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	320	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	54	U	54	160	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	54	U	54	160	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	54	U	54	160	10000000	1
10132	HMX	2691-41-0	130	U	130	400	10000000	1
10132	Nitrobenzene	98-95-3	54	U	54	160	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,200	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	160	10000000	1
10132	3-Nitrotoluene	99-08-1	130	U	130	160	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	160	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,200	10000000	1
10132	RDX	121-82-4	67	U	67	160	10000000	1
10132	Tetryl	479-45-8	82	U	82	160	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	54	U	54	160	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	54	U	54	160	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	640	U	640	1,600		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.8		1
10225	PCB-1232	11141-16-5	0.56	U	0.56	1.8		1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.8		1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8		1
10225	PCB-1254	11097-69-1	0.35	U	0.35	1.8		1
10225	PCB-1260	11096-82-5	0.35	U	0.35	1.8		1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	540		1
10501	Isopropanol	67-63-0	110	U	110	540		1
10501	Methanol	67-56-1	110	U	110	540		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.6	U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6	U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6	U	1.6	3.8		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,100		5.34	21.2		1
07914	Boron	7440-42-8	2.87	J	0.944	5.31		1
01650	Calcium	7440-70-2	2,820		6.51	21.2		1
01654	Iron	7439-89-6	18,400		5.00	21.2		1
01656	Lithium	7439-93-2	20.9		0.23	2.1		1
01657	Magnesium	7439-95-4	3,670		2.70	10.6		1
06958	Manganese	7439-96-5	255		0.0828	0.531		1
10145	Phosphorus	7723-14-0	306		0.594	10.6		1
01662	Potassium	7440-09-7	2,360		19.1	53.1		1
01667	Sodium	7440-23-5	105	J	39.6	106		1
07968	Strontium	7440-24-6	10.9		0.0658	0.531		1
06969	Tin	7440-31-5	2.33	J	1.06	10.6		1
06970	Titanium	7440-32-6	1,050		0.807	2.12		2
10146	Zirconium	7440-67-7	0.891	U	0.891	5.31		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0994	J	0.0637	0.212		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.96		0.0637	0.424		2
06126	Barium	7440-39-3	89.2		0.115	0.424		2
06127	Beryllium	7440-41-7	0.715		0.0170	0.106		2
06128	Cadmium	7440-43-9	0.0626	J	0.0382	0.106		2
06131	Chromium	7440-47-3	18.8		0.127	0.424		2
06132	Cobalt	7440-48-4	5.88		0.0212	0.106		2
06133	Copper	7440-50-8	6.80		0.0700	0.424		2
06135	Lead	7439-92-1	5.49		0.0110	0.212		2
06138	Molybdenum	7439-98-7	0.760		0.0531	0.106		2
06139	Nickel	7440-02-0	10.5		0.106	0.424		2
06141	Selenium	7782-49-2	0.153	J	0.0424	0.424		2
06142	Silver	7440-22-4	0.0190	J	0.0127	0.106		2
06145	Thallium	7440-28-0	0.418		0.0318	0.106		2
06148	Vanadium	7440-62-2	38.1		0.0233	0.106		2
06149	Zinc	7440-66-6	79.0		0.594	3.18		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0030	U	0.0030	0.105		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.4		0.86	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2	J	0.86	1.6		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	32.2		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.79	J	0.21	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.19	U	0.19	0.53		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	412		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.26		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	6.7		0.50	0.50		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0145 SDG#: DE037-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-001-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103482AA	12/15/2010 08:03	Laura M Krieger	0.96
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010 06:24	Sara E Johnson	21.59
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:33	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:44	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034823296	12/14/2010 17:44	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010 17:30	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/05/2011 14:30	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 06:27	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 08:46	Linda M Hartenstine	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010 14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010 21:33	Marie D John	23.06
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010 17:48	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 08:08	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 00:24	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 08:03	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0145 SDG#: DE037-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 23:06	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 10:17	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:39	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 21:11	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:22	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:22	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:22	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:22	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:06	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201B	01/05/2011 18:18	Ashley M Adams	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163885
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0145 SDG#: DE037-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201B	01/05/2011 18:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201B	01/04/2011 07:56	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 02:35	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:16	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201B	01/04/2011 14:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201B	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0191 SDG#: DE037-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	35		6.8	8.2		0.85
06192	Benzene	71-43-2	0.10	U	0.10	4.1		0.85
06192	Bromobenzene	108-86-1	0.13	U	0.13	4.1		0.85
06192	Bromochloromethane	74-97-5	0.34	U	0.34	4.1		0.85
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.1		0.85
06192	Bromoform	75-25-2	0.41	U	0.41	4.1		0.85
06192	Bromomethane	74-83-9	0.26	U	0.26	4.1		0.85
06192	2-Butanone	78-93-3	5.6	J	1.2	8.2		0.85
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.1		0.85
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.1		0.85
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	4.1		0.85
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	4.1		0.85
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.1		0.85
06192	Chloroethane	75-00-3	0.13	U	0.13	4.1		0.85
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31	U	0.31	4.1		0.85
06192	Chloroform	67-66-3	0.12	U	0.12	4.1		0.85
06192	Chloromethane	74-87-3	0.34	U	0.34	4.1		0.85
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	4.1		0.85
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	4.1		0.85
06192	Chlorotrifluoroethene	79-38-9	0.51	U	0.51	5.1		0.85
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.71	U	0.71	4.1		0.85
06192	Dibromochloromethane	124-48-1	0.20	U	0.20	4.1		0.85
06192	1,2-Dibromoethane	106-93-4	0.17	U	0.17	4.1		0.85
06192	Dibromomethane	74-95-3	0.24	U	0.24	4.1		0.85
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.1		0.85
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.1		0.85
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	4.1		0.85
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.1		0.85
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.1		0.85
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	4.1		0.85
06192	1,1-Dichloroethene	75-35-4	0.40	U	0.40	4.1		0.85
06192	cis-1,2-Dichloroethene	156-59-2	0.19	U	0.19	4.1		0.85
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.1		0.85
06192	1,2-Dichloropropane	78-87-5	0.17	U	0.17	4.1		0.85
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.1		0.85
06192	2,2-Dichloropropane	594-20-7	0.17	U	0.17	4.1		0.85
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	4.1		0.85
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	4.1		0.85
06192	trans-1,3-Dichloropropene	10061-02-6	0.17	U	0.17	4.1		0.85
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.1		0.85
06192	Freon 113	76-13-1	0.11	U	0.11	4.1		0.85
06192	Freon 133a	75-88-7	0.51	U	0.51	5.1		0.85
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	4.1		0.85
06192	2-Hexanone	591-78-6	1.6	U	1.6	8.2		0.85
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.1		0.85
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.1		0.85
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21	U	0.21	4.1		0.85
06192	4-Methyl-2-pentanone	108-10-1	0.40	U	0.40	8.2		0.85
06192	Methylene Chloride	75-09-2	1.5	J	0.24	4.1		0.85
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.1		0.85

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0191 SDG#: DE037-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.10	U	0.10	4.1		0.85
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.1		0.85
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23	U	0.23	4.1		0.85
06192	Tetrachloroethene	127-18-4	0.20	U	0.20	4.1		0.85
06192	Toluene	108-88-3	0.11	J	0.08	4.1		0.85
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	4.1		0.85
06192	1,2,4-Trichlorobenzene	120-82-1	0.18	U	0.18	4.1		0.85
06192	1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	4.1		0.85
06192	1,1,2-Trichloroethane	79-00-5	0.27	U	0.27	4.1		0.85
06192	Trichloroethene	79-01-6	0.15	U	0.15	4.1		0.85
06192	Trichlorofluoromethane	75-69-4	0.30	U	0.30	4.1		0.85
06192	1,2,3-Trichloropropane	96-18-4	0.34	U	0.34	4.1		0.85
06192	1,2,4-Trimethylbenzene	95-63-6	0.41	U	0.41	4.1		0.85
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.1		0.85
06192	Vinyl Chloride	75-01-4	0.20	U	0.20	4.1		0.85
06192	m+p-Xylene	179601-23-1	0.17	U	0.17	4.1		0.85
06192	o-Xylene	95-47-6	0.17	U	0.17	4.1		0.85
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.3	U	5.3	16		22.05
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	83.9		40.2	80.3		2
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	200	U	200	600		1
04688	Benzidine	92-87-5	1,400	U	1,400	4,000		1
04688	Benzoic acid	65-85-0	200	U	200	600		1
04688	Benzyl alcohol	100-51-6	200	U	200	600		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200		1
04688	Carbazole	86-74-8	20	U	20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	40	U	40	200		1
04688	4-Chloroaniline	106-47-8	80	U	80	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200		1
04688	2-Chlorophenol	95-57-8	20	U	20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U	40	200		1
04688	Dibenzofuran	132-64-9	20	U	20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	400		1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200		1
04688	2,4-Dimethylphenol	105-67-9	40	U	40	200		1
04688	3,5-Dimethylphenol	108-68-9	40	U	40	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	600		1
04688	2,4-Dinitrophenol	51-28-5	800	U	800	2,400		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0191 SDG#: DE037-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	40	U	40	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	20	U	20	400		1
04688	Hexachlorobenzene	118-74-1	20	U	20	200		1
04688	Hexachlorobutadiene	87-68-3	80	U	80	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	600		1
04688	Hexachloroethane	67-72-1	20	U	20	200		1
04688	Isophorone	78-59-1	20	U	20	200		1
04688	2-Methylphenol	95-48-7	40	U	40	200		1
04688	4-Methylphenol	106-44-5	40	U	40	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	20	U	20	200		1
04688	3-Nitroaniline	99-09-2	40	U	40	200		1
04688	4-Nitroaniline	100-01-6	80	U	80	200		1
04688	Nitrobenzene	98-95-3	20	U	20	200		1
04688	2-Nitrophenol	88-75-5	20	U	20	200		1
04688	4-Nitrophenol	100-02-7	200	U	200	600		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	200	U	200	600		1
04688	Phenol	108-95-2	20	U	20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	40	U	40	200		1
04688	2,4,6-Trichlorophenol	88-06-2	40	U	40	200		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.80	U	0.80	2.0		1
10138	Acenaphthylene	208-96-8	0.40	U	0.40	2.0		1
10138	Anthracene	120-12-7	0.40	U	0.40	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.80	U	0.80	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.80	U	0.80	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.80	U	0.80	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.80	U	0.80	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.80	U	0.80	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.2	U	7.2	22		1
10138	Di-n-butylphthalate	84-74-2	7.2	U	7.2	22		1
10138	Chrysene	218-01-9	0.40	U	0.40	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	U	0.80	2.0		1
10138	Diethylphthalate	84-66-2	7.2	U	7.2	22		1
10138	Dimethylphthalate	131-11-3	7.2	U	7.2	22		1
10138	Fluoranthene	206-44-0	0.80	U	0.80	2.0		1
10138	Fluorene	86-73-7	0.80	U	0.80	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	U	0.80	2.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0191 SDG#: DE037-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.80	U	0.80	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.80	U	0.80	2.0		1
10138	Naphthalene	91-20-3	0.80	U	0.80	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.80	U	0.80	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.2	U	7.2	22		1
10138	Phenanthrene	85-01-8	0.80	U	0.80	2.0		1
10138	Pyrene	129-00-0	0.80	U	0.80	2.0		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.1		21.93
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	90	U	90	180	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	60	U	60	180	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U	120	360	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U	120	360	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	60	U	60	180	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	60	U	60	180	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	60	U	60	180	10000000	1
10132	HMX	2691-41-0	150	U	150	450	10000000	1
10132	Nitrobenzene	98-95-3	60	U	60	180	10000000	1
10132	Nitroglycerin	55-63-0	1,200	U	1,200	3,600	10000000	1
10132	2-Nitrotoluene	88-72-2	120	U	120	180	10000000	1
10132	3-Nitrotoluene	99-08-1	150	U	150	180	10000000	1
10132	4-Nitrotoluene	99-99-0	120	U	120	180	10000000	1
10132	PETN	78-11-5	1,200	U	1,200	3,600	10000000	1
10132	RDX	121-82-4	75	U	75	180	10000000	1
10132	Tetryl	479-45-8	92	U	92	180	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	60	U	60	180	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	60	U	60	180	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0191 SDG#: DE037-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	4,000		720	1,800		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	4.0		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	4.0		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	4.0		1
10225	PCB-1016	12674-11-2	0.40	U	0.40	2.0		1
10225	PCB-1221	11104-28-2	0.60	U	0.60	2.0		1
10225	PCB-1232	11141-16-5	0.63	U	0.63	2.0		1
10225	PCB-1242	53469-21-9	0.60	U	0.60	2.0		1
10225	PCB-1248	12672-29-6	0.40	U	0.40	2.0		1
10225	PCB-1254	11097-69-1	0.40	U	0.40	2.0		1
10225	PCB-1260	11096-82-5	0.40	U	0.40	2.0		1
10225	PCB-1262	37324-23-5	0.40	U	0.40	2.0		1
10225	PCB-1268	11100-14-4	0.40	U	0.40	2.0		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	120	U	120	600		1
10501	Isopropanol	67-63-0	120	U	120	600		1
10501	Methanol	67-56-1	120	U	120	600		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.8	U	1.8	4.2		1
10318	o-Terphenyl	84-15-1	1.8	U	1.8	4.2		1
10318	p-Terphenyl	92-94-4	1.8	U	1.8	4.2		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,800		6.00	23.9		1
07914	Boron	7440-42-8	7.30		1.06	5.96		1
01650	Calcium	7440-70-2	19,000		7.31	23.9		1
01654	Iron	7439-89-6	34,500		11.2	47.7		2
01656	Lithium	7439-93-2	25.3		0.26	2.4		1
01657	Magnesium	7439-95-4	7,280		3.03	11.9		1
06958	Manganese	7439-96-5	398		0.0930	0.596		1
10145	Phosphorus	7723-14-0	413		0.668	11.9		1
01662	Potassium	7440-09-7	4,570		21.5	59.6		1
01667	Sodium	7440-23-5	254		44.5	119		1
07968	Strontium	7440-24-6	44.3		0.0740	0.596		1
06969	Tin	7440-31-5	2.80	J	1.19	11.9		1
06970	Titanium	7440-32-6	1,470		0.907	2.39		2
10146	Zirconium	7440-67-7	4.76	J	1.00	5.96		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.559		0.0723	0.241		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0191 SDG#: DE037-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	12.2		0.0723	0.482		2
06126	Barium	7440-39-3	203		0.130	0.482		2
06127	Beryllium	7440-41-7	1.42		0.0193	0.120		2
06128	Cadmium	7440-43-9	0.212		0.0434	0.120		2
06131	Chromium	7440-47-3	55.4		0.145	0.482		2
06132	Cobalt	7440-48-4	13.7		0.0241	0.120		2
06133	Copper	7440-50-8	21.8		0.0795	0.482		2
06135	Lead	7439-92-1	13.0		0.0125	0.241		2
06138	Molybdenum	7439-98-7	1.12		0.0602	0.120		2
06139	Nickel	7440-02-0	28.4		0.120	0.482		2
06141	Selenium	7782-49-2	0.190	J	0.0482	0.482		2
06142	Silver	7440-22-4	0.0765	J	0.0145	0.120		2
06145	Thallium	7440-28-0	0.474		0.0361	0.120		2
06148	Vanadium	7440-62-2	101		0.0265	0.120		2
06149	Zinc	7440-66-6	115		0.675	3.61		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0073	J	0.0033	0.116		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.7		0.96	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.96	U	0.96	1.8		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8	U	10.8	36.1		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.37	J	0.24	1.2		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.22	U	0.22	0.61		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	433		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.46		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	17.0		0.50	0.50		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0191 SDG#: DE037-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-001-SA5C-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010	19:24	Laura M Krieger	0.85
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103493AA	12/16/2010	06:43	Sara E Johnson	22.05
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010	17:38	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034823296	12/14/2010	17:44	Christopher M Klumpp	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034823296	12/14/2010	17:44	Christopher M Klumpp	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034823296	12/14/2010	17:35	Christopher M Klumpp	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10354SLC026	01/06/2011	10:00	Timothy J Trees	2
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011	06:52	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010	09:19	Linda M Hartenstine	1
11630	NDMA Soil Microwave	SW-846 3546	1	10354SLC026	12/20/2010	14:45	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010	09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010	09:00	Olivia I Santiago	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34A	12/15/2010	22:09	Marie D John	21.93
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034823296	12/14/2010	17:46	Christopher M Klumpp	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010	08:51	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010	00:34	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010	08:22	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010	07:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0191 SDG#: DE037-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 23:21	Dustin A Underkoffler	1
10318	Terphenyls in Soils	SW-846 8015B	1	103550026A	12/23/2010 11:02	Heather E Williams	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550026A	12/22/2010 07:00	Kerrie A Freeburn	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/22/2010 03:42	Tara L Snyder	2
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:42	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 21:15	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:57	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:07	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201B	01/05/2011 18:32	Ashley M Adams	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163886
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S0191 SDG#: DE037-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11004004201B	01/05/2011 18:32	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201B	01/04/2011 08:20	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 03:07	Venia B McFadden	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:22	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201B	01/04/2011 14:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201B	01/01/2011 10:45	Erik J Frederiksen	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S3205 SDG#: DE037-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	43	J	19	190		1
04688	Aniline	62-53-3	190	U	190	570		1
04688	Anthracene	120-12-7	37	J	19	190		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	400		19	190		1
04688	Benzo(a)pyrene	50-32-8	650		19	190		1
04688	Benzo(b)fluoranthene	205-99-2	680		19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	500		19	190		1
04688	Benzo(k)fluoranthene	207-08-9	280		19	190		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	24	J	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	76	U	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Chrysene	218-01-9	490		19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	120	J	19	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	760	U	760	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Fluoranthene	206-44-0	420		19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	420		19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S3205 SDG#: DE037-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	4-Nitroaniline	100-01-6	76	U	76	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenanthrene	85-01-8	110	J	19	190		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	Pyrene	129-00-0	540		19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthylene	208-96-8	0.49	J	0.38	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21		1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	30		6.9	21		1
10138	Fluorene	86-73-7	2.0		0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	1.9	J	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	2.4		0.76	1.9		1
10138	Naphthalene	91-20-3	6.3		0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21		1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.							
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1		1
10401	Dalapon	75-99-0	5.0	U	5.0	10		1
10401	2,4-DB	94-82-6	30	U	30	30		1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.92	U	0.92	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U	0.92	1.9		1
10401	MCPA	94-74-6	1,100	U	1,100	1,100		1
10401	MCPP (Mecoprop)	93-65-2	250	U	250	290		1
10401	2,4,5-T	93-76-5	0.094	U	0.094	0.19		1
10401	2,4,5-TP	93-72-1	0.086	U	0.086	0.19		1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. MCPP and 2,4-DB are detected in the method blank at a concentration of 160 ug/l and 1.2 ug/l respectively. The sample was reextracted outside the sample hold							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S3205 SDG#: DE037-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	time. The method blank in the reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPP and 2,4-DB. Due to interfering peaks on the chromatogram, the values reported for MCPP represent the lowest reporting limits attainable.							
Perchlorate		**SW-846 6850 1/2007**	**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.4	U	2.4	5.7		1
Pesticides/PCBs		**SW-846 8081A**	**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.079	U	0.079	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.35		0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	5.0	U	5.0	5.0		1
01363	p,p-DDD	72-54-8	2.4	U	2.4	2.4		1
01363	p,p-DDE	72-55-9	1.3	U	1.3	1.3		1
01363	p,p-DDT	50-29-3	2.4	U	2.4	2.4		1
01363	Delta BHC	319-86-8	0.19		0.041	0.19		1
01363	Dieldrin	60-57-1	0.47	U	0.47	0.47		1
01363	Endosulfan I	959-98-8	0.11	U	0.11	0.19		1
01363	Endosulfan II	33213-65-9	0.32	U	0.32	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.76	U	0.76	0.76		1
01363	Endrin	72-20-8	0.076	U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.62	U	0.62	0.62		1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.084	U	0.084	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.33	U	0.33	0.33		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.076	U	0.076	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1
	The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs		**SW-846 8082**	**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.3	U	2.3	7.6		2
10225	Aroclor 5442	12642-23-8	2.3	U	2.3	7.6		2
10225	Aroclor 5460	11126-42-4	8.5		2.3	7.6		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S3205 SDG#: DE037-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	PCB-1016	12674-11-2	0.76	U	0.76	3.9		2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.9		2
10225	PCB-1232	11141-16-5	1.2	U	1.2	3.9		2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.9		2
10225	PCB-1248	12672-29-6	0.76	U	0.76	3.9		2
10225	PCB-1254	11097-69-1	18		0.76	3.9		2
10225	PCB-1260	11096-82-5	9.5		0.76	3.9		2
10225	PCB-1262	37324-23-5	0.76	U	0.76	3.9		2
10225	PCB-1268	11100-14-4	0.76	U	0.76	3.9		2
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	10,300		5.64	22.4		1
07914	Boron	7440-42-8	4.97	J	0.998	5.61		1
01650	Calcium	7440-70-2	3,360		6.88	22.4		1
01654	Iron	7439-89-6	17,800		5.28	22.4		1
01656	Lithium	7439-93-2	19.4		0.25	2.2		1
01657	Magnesium	7439-95-4	4,130		2.85	11.2		1
06958	Manganese	7439-96-5	254		0.0875	0.561		1
10145	Phosphorus	7723-14-0	386		0.628	11.2		1
01662	Potassium	7440-09-7	2,790		20.2	56.1		1
01667	Sodium	7440-23-5	78.8	J	41.8	112		1
07968	Strontium	7440-24-6	18.3		0.0695	0.561		1
06969	Tin	7440-31-5	2.66	J	1.12	11.2		1
06970	Titanium	7440-32-6	1,030		0.853	2.24		2
10146	Zirconium	7440-67-7	1.22	J	0.942	5.61		1
	SW-846 6020		mg/kg		mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	0.192	J	0.0673	0.224		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.28		0.0673	0.449		2
06126	Barium	7440-39-3	112		0.121	0.449		2
06127	Beryllium	7440-41-7	0.616		0.0179	0.112		2
06128	Cadmium	7440-43-9	0.249		0.0404	0.112		2
06131	Chromium	7440-47-3	25.4		0.135	0.449		2
06132	Cobalt	7440-48-4	6.30		0.0224	0.112		2
06133	Copper	7440-50-8	13.1		0.0740	0.449		2
06135	Lead	7439-92-1	25.0		0.0292	0.561		5
06138	Molybdenum	7439-98-7	0.707		0.0561	0.112		2
06139	Nickel	7440-02-0	17.6		0.112	0.449		2
06141	Selenium	7782-49-2	0.168	J	0.0449	0.449		2
06142	Silver	7440-22-4	1.39		0.0135	0.112		2
06145	Thallium	7440-28-0	0.298		0.0337	0.112		2
06148	Vanadium	7440-62-2	42.8		0.0247	0.112		2
06149	Zinc	7440-66-6	109		0.628	3.37		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S3205 SDG#: DE037-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 7471A**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0148 J	0.0032	0.111		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.7	0.92	1.1		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.3		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.1		1
	ASTM D1498		**mV**	**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	435	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.48	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011 07:17	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010 09:52	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010 09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010 09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010 05:24	John W Perkins	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S3205 SDG#: DE037-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103490017A	12/20/2010 18:21	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011 03:15	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010 08:41	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010 14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010 07:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010 01:40	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103490017A	12/16/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/22/2010 03:46	Tara L Snyder	2
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 21:19	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:34	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 10:59	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/26/2010 07:22	Choon Y Tian	5
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:34	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:34	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:34	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:08	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163887
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S3205 SDG#: DE037-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201B	01/05/2011 19:15	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201B	01/04/2011 09:08	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 03:23	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201B	01/04/2011 14:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201B	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163888
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S3305 SDG#: DE037-17*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	530		1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U	180	530		1
04688	Benzyl alcohol	100-51-6	180	U	180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180		1
04688	4-Chloroaniline	106-47-8	71	U	71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530		1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	35	U	35	180		1
04688	4-Methylphenol	106-44-5	35	U	35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	35	U	35	180		1
04688	4-Nitroaniline	100-01-6	71	U	71	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	530		1
04688	Phenol	108-95-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163888
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S3305 SDG#: DE037-17*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8		1
10138	Anthracene	120-12-7	0.99	J	0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	15		0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	25		0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	39		0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	11		0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	14		0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19		1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19		1
10138	Chrysene	218-01-9	20		0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	3.2		0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	17	J	6.4	19		1
10138	Fluoranthene	206-44-0	14		0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	10		0.71	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.94	J	0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.96	J	0.71	1.8		1
10138	Naphthalene	91-20-3	1.1	J	0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19		1
10138	Phenanthrene	85-01-8	6.2		0.71	1.8		1
10138	Pyrene	129-00-0	15		0.71	1.8		1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.3 ug/kg. The blank value was not subtracted from the analytical result.

Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8		1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6		1
10401	2,4-DB	94-82-6	5.1		0.66	1.8		1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3		1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.5		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8		1
10401	MCPA	94-74-6	270	U	270	270		1
10401	MCPP (Mecoprop)	93-65-2	410	U	410	410		1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18		1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
2,4-DB is detected in the method blank at a concentration of 1.2 ug/l. The sample was reextracted outside the sample hold time. The method blank in the

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163888
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S3305 SDG#: DE037-17*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	reextraction has no analytes detected. Similar results were obtained in both extractions. The original, in hold, trial data is reported. Due to interfering peaks on the chromatogram, the values reported for MCPP and MCPA represent the lowest reporting limits attainable.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18		1
01363	Alpha BHC	319-84-6	0.16	J	0.036	0.18		1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18		1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6		1
01363	p,p-DDD	72-54-8	0.29	U	0.29	0.36		1
01363	p,p-DDE	72-55-9	0.11	U	0.11	0.36		1
01363	p,p-DDT	50-29-3	0.37	U	0.37	0.37		1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18		1
01363	Dieldrin	60-57-1	0.15	U	0.15	0.36		1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18		1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36		1
01363	Endrin	72-20-8	0.070	U	0.070	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.070	U	0.070	0.36		1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36		1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.047	U	0.047	0.18		1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8		1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36		1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0		1
	The surrogate TCX recovery in the LCS is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.1	U	2.1	7.0		2
10225	Aroclor 5442	12642-23-8	2.1	U	2.1	7.0		2
10225	Aroclor 5460	11126-42-4	2.1	U	2.1	7.0		2
10225	PCB-1016	12674-11-2	0.70	U	0.70	3.6		2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.6		2
10225	PCB-1232	11141-16-5	1.1	U	1.1	3.6		2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.6		2
10225	PCB-1248	12672-29-6	0.70	U	0.70	3.6		2
10225	PCB-1254	11097-69-1	1.7	J	0.70	3.6		2
10225	PCB-1260	11096-82-5	2.1	J	0.70	3.6		2
10225	PCB-1262	37324-23-5	0.70	U	0.70	3.6		2
10225	PCB-1268	11100-14-4	0.70	U	0.70	3.6		2
	The stated QC limits are advisory only until sufficient data points							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

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

Analysis Report

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163888
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

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

S3305 SDG#: DE037-17*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	7,300		5.13	20.4		1
07914	Boron	7440-42-8	3.23	J	0.908	5.10		1
01650	Calcium	7440-70-2	1,710		6.26	20.4		1
01654	Iron	7439-89-6	13,900		4.81	20.4		1
01656	Lithium	7439-93-2	14.9		0.22	2.0		1
01657	Magnesium	7439-95-4	3,090		2.59	10.2		1
06958	Manganese	7439-96-5	247		0.0796	0.510		1
10145	Phosphorus	7723-14-0	267		0.572	10.2		1
01662	Potassium	7440-09-7	1,810		18.4	51.0		1
01667	Sodium	7440-23-5	64.8	J	38.1	102		1
07968	Strontium	7440-24-6	9.87		0.0633	0.510		1
06969	Tin	7440-31-5	1.86	J	1.02	10.2		1
06970	Titanium	7440-32-6	759		0.388	1.02		1
10146	Zirconium	7440-67-7	0.857	U	0.857	5.10		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.286		0.0624	0.208		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.50		0.0624	0.416		2
06126	Barium	7440-39-3	133		0.112	0.416		2
06127	Beryllium	7440-41-7	0.782		0.0167	0.104		2
06128	Cadmium	7440-43-9	0.150		0.0375	0.104		2
06131	Chromium	7440-47-3	36.8		0.125	0.416		2
06132	Cobalt	7440-48-4	7.49		0.0208	0.104		2
06133	Copper	7440-50-8	15.8		0.0687	0.416		2
06135	Lead	7439-92-1	15.0		0.0108	0.208		2
06138	Molybdenum	7439-98-7	0.691		0.0520	0.104		2
06139	Nickel	7440-02-0	21.6		0.104	0.416		2
06141	Selenium	7782-49-2	0.209	J	0.0416	0.416		2
06142	Silver	7440-22-4	0.329		0.0125	0.104		2
06145	Thallium	7440-28-0	0.435		0.0312	0.104		2
06148	Vanadium	7440-62-2	58.0		0.0229	0.104		2
06149	Zinc	7440-66-6	118		0.583	3.12		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0029	U	0.0029	0.0998		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.90	J	0.85	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	31.8		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163888
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3305 SDG#: DE037-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	433	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.00	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10351SLB026	01/04/2011	07:42	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10351SLC026	12/30/2010	10:26	Linda M Hartenstine	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10351SLC026	12/18/2010	09:00	Olivia I Santiago	1
00381	BNA Soil Sonication	SW-846 3550B	1	10351SLB026	12/18/2010	09:00	Olivia I Santiago	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103510026A	12/21/2010	06:47	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550006A	01/06/2011	03:28	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103510032A	12/23/2010	08:59	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550006A	12/21/2010	14:30	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103510032A	12/20/2010	07:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103510026A	12/20/2010	01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708003	12/20/2010	21:22	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708003	12/20/2010	21:22	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708003	12/20/2010	21:22	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708003	12/20/2010	21:22	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708003	12/20/2010	21:22	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708003	12/20/2010	21:22	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163888
LLI Group # 1225274
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

Submitted: 12/14/2010 10:05
Reported: 01/25/2011 16:47

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3305 SDG#: DE037-17*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708003	12/20/2010 21:22	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026001D	12/23/2010 18:37	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026001A	12/24/2010 11:01	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026001C	12/23/2010 18:37	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026001B	12/23/2010 18:37	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026001A	12/23/2010 18:37	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711002	12/20/2010 06:09	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708003	12/17/2010 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026001	12/17/2010 20:40	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711002	12/17/2010 23:00	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11004004201B	01/05/2011 19:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001201B	01/04/2011 09:32	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10364243201A	01/04/2011 03:39	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11004004201B	01/04/2011 14:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001201B	01/01/2011 10:45	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10364243201A	12/30/2010 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B103482AA	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163885									
Acetone	6.7	U	6.7	8.0	ug/kg	183		32-209		
Benzene	0.10	U	0.10	4.0	ug/kg	100		80-120		
Bromobenzene	0.13	U	0.13	4.0	ug/kg	91		79-120		
Bromochloromethane	0.33	U	0.33	4.0	ug/kg	97		79-124		
Bromodichloromethane	0.08	U	0.08	4.0	ug/kg	97		78-120		
Bromoform	0.40	U	0.40	4.0	ug/kg	95		70-120		
Bromomethane	0.25	U	0.25	4.0	ug/kg	72		32-162		
2-Butanone	1.2	U	1.2	8.0	ug/kg	133		46-153		
n-Butylbenzene	0.12	U	0.12	4.0	ug/kg	98		72-120		
sec-Butylbenzene	0.06	U	0.06	4.0	ug/kg	97		75-120		
tert-Butylbenzene	0.16	U	0.16	4.0	ug/kg	92		75-120		
Carbon Tetrachloride	0.14	U	0.14	4.0	ug/kg	101		69-122		
Chlorobenzene	0.11	U	0.11	4.0	ug/kg	97		80-120		
Chloroethane	0.13	U	0.13	4.0	ug/kg	77		37-154		
2-Chloroethyl Vinyl Ether	0.30	U	0.30	4.0	ug/kg	94		43-146		
Chloroform	0.22	J	0.12	4.0	ug/kg	102		80-120		
Chloromethane	0.33	U	0.33	4.0	ug/kg	72		54-132		
2-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	94		78-120		
4-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	96		79-120		
Chlorotrifluoroethene	0.50	U	0.50	5.0	ug/kg	101		22-131		
1,2-Dibromo-3-chloropropane	0.70	U	0.70	4.0	ug/kg	90		58-120		
Dibromochloromethane	0.20	U	0.20	4.0	ug/kg	97		77-120		
1,2-Dibromoethane	0.17	U	0.17	4.0	ug/kg	95		80-120		
Dibromomethane	0.24	U	0.24	4.0	ug/kg	99		80-120		
1,2-Dichlorobenzene	0.09	U	0.09	4.0	ug/kg	95		79-120		
1,3-Dichlorobenzene	0.12	U	0.12	4.0	ug/kg	92		78-120		
1,4-Dichlorobenzene	0.16	U	0.16	4.0	ug/kg	94		79-120		
Dichlorodifluoromethane	0.12	U	0.12	4.0	ug/kg	54		20-120		
1,1-Dichloroethane	0.10	U	0.10	4.0	ug/kg	99		80-120		
1,2-Dichloroethane	0.15	U	0.15	4.0	ug/kg	100		71-129		
1,1-Dichloroethene	0.39	U	0.39	4.0	ug/kg	99		73-123		
cis-1,2-Dichloroethene	0.19	U	0.19	4.0	ug/kg	99		80-120		
trans-1,2-Dichloroethene	0.12	U	0.12	4.0	ug/kg	98		79-120		
1,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	99		80-120		
1,3-Dichloropropane	0.08	U	0.08	4.0	ug/kg	96		80-120		
2,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	98		72-123		
1,1-Dichloropropene	0.13	U	0.13	4.0	ug/kg	98		77-120		
cis-1,3-Dichloropropene	0.16	U	0.16	4.0	ug/kg	91		80-120		
trans-1,3-Dichloropropene	0.17	U	0.17	4.0	ug/kg	90		77-120		
Ethylbenzene	0.06	U	0.06	4.0	ug/kg	98		80-120		
Freon 113	0.11	U	0.11	4.0	ug/kg	100		61-126		
Freon 133a	0.50	U	0.50	5.0	ug/kg	92		78-120		
Hexachlorobutadiene	0.14	U	0.14	4.0	ug/kg	92		57-120		
2-Hexanone	1.6	U	1.6	8.0	ug/kg	87		45-155		
Isopropylbenzene	0.06	U	0.06	4.0	ug/kg	99		76-120		
p-Isopropyltoluene	0.11	U	0.11	4.0	ug/kg	98		75-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21	U	0.21	4.0	ug/kg	94		74-121		
4-Methyl-2-pentanone	0.39	U	0.39	8.0	ug/kg	78		61-134		
Methylene Chloride	1.3	J	0.24	4.0	ug/kg	99		76-124		
n-Propylbenzene	0.07	U	0.07	4.0	ug/kg	100		77-120		
Styrene	0.10	U	0.10	4.0	ug/kg	97		76-120		
1,1,1,2-Tetrachloroethane	0.11	U	0.11	4.0	ug/kg	99		80-120		
1,1,2,2-Tetrachloroethane	0.23	U	0.23	4.0	ug/kg	95		71-123		
Tetrachloroethene	0.20	U	0.20	4.0	ug/kg	99		77-120		
Toluene	0.09	J	0.08	4.0	ug/kg	98		80-120		
1,2,3-Trichlorobenzene	0.14	U	0.14	4.0	ug/kg	92		64-120		
1,2,4-Trichlorobenzene	0.18	U	0.18	4.0	ug/kg	89		68-120		
1,1,1-Trichloroethane	0.20	U	0.20	4.0	ug/kg	100		71-125		
1,1,2-Trichloroethane	0.27	U	0.27	4.0	ug/kg	96		80-120		
Trichloroethene	0.15	U	0.15	4.0	ug/kg	97		80-120		
Trichlorofluoromethane	0.29	U	0.29	4.0	ug/kg	85		58-133		
1,2,3-Trichloropropane	0.33	U	0.33	4.0	ug/kg	93		71-123		
1,2,4-Trimethylbenzene	0.40	U	0.40	4.0	ug/kg	97		79-120		
1,3,5-Trimethylbenzene	0.10	U	0.10	4.0	ug/kg	96		78-120		
Vinyl Chloride	0.20	U	0.20	4.0	ug/kg	76		53-120		
m+p-Xylene	0.17	U	0.17	4.0	ug/kg	99		80-120		
o-Xylene	0.17	U	0.17	4.0	ug/kg	95		80-120		
Batch number: B103501AA	Sample number(s): 6163886									
Acetone	6.7	U	6.7	8.0	ug/kg	189	181	32-209	5	30
Benzene	0.10	U	0.10	4.0	ug/kg	105	105	80-120	0	30
Bromobenzene	0.13	U	0.13	4.0	ug/kg	93	92	79-120	1	30
Bromochloromethane	0.33	U	0.33	4.0	ug/kg	101	101	79-124	0	30
Bromodichloromethane	0.08	U	0.08	4.0	ug/kg	98	97	78-120	0	30
Bromoform	0.40	U	0.40	4.0	ug/kg	95	94	70-120	1	30
Bromomethane	0.25	U	0.25	4.0	ug/kg	76	77	32-162	2	30
2-Butanone	1.2	U	1.2	8.0	ug/kg	144	139	46-153	3	30
n-Butylbenzene	0.12	U	0.12	4.0	ug/kg	100	99	72-120	1	30
sec-Butylbenzene	0.06	U	0.06	4.0	ug/kg	99	99	75-120	0	30
tert-Butylbenzene	0.16	U	0.16	4.0	ug/kg	94	95	75-120	1	30
Carbon Tetrachloride	0.14	U	0.14	4.0	ug/kg	103	102	69-122	1	30
Chlorobenzene	0.11	U	0.11	4.0	ug/kg	98	98	80-120	0	30
Chloroethane	0.13	U	0.13	4.0	ug/kg	80	82	37-154	2	30
2-Chloroethyl Vinyl Ether	0.30	U	0.30	4.0	ug/kg	106	103	43-146	3	30
Chloroform	0.37	J	0.12	4.0	ug/kg	104	103	80-120	0	30
Chloromethane	0.33	U	0.33	4.0	ug/kg	89	90	54-132	0	30
2-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	96	96	78-120	1	30
4-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	96	95	79-120	0	30
Chlorotrifluoroethene	0.50	U	0.50	5.0	ug/kg	84	85	22-131	2	30
1,2-Dibromo-3-chloropropane	0.70	U	0.70	4.0	ug/kg	97	94	58-120	4	30
Dibromochloromethane	0.20	U	0.20	4.0	ug/kg	97	95	77-120	2	30
1,2-Dibromoethane	0.17	U	0.17	4.0	ug/kg	99	97	80-120	2	30
Dibromomethane	0.24	U	0.24	4.0	ug/kg	102	100	80-120	2	30
1,2-Dichlorobenzene	0.09	U	0.09	4.0	ug/kg	95	95	79-120	0	30
1,3-Dichlorobenzene	0.12	U	0.12	4.0	ug/kg	93	93	78-120	0	30
1,4-Dichlorobenzene	0.16	U	0.16	4.0	ug/kg	95	93	79-120	1	30
Dichlorodifluoromethane	0.12	U	0.12	4.0	ug/kg	76	75	20-120	1	30
1,1-Dichloroethane	0.10	U	0.10	4.0	ug/kg	104	104	80-120	1	30
1,2-Dichloroethane	0.15	U	0.15	4.0	ug/kg	103	102	71-129	1	30
1,1-Dichloroethene	0.39	U	0.39	4.0	ug/kg	101	100	73-123	1	30
cis-1,2-Dichloroethene	0.19	U	0.19	4.0	ug/kg	103	102	80-120	2	30
trans-1,2-Dichloroethene	0.12	U	0.12	4.0	ug/kg	102	101	79-120	0	30
1,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	104	103	80-120	1	30
1,3-Dichloropropane	0.08	U	0.08	4.0	ug/kg	100	99	80-120	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	102	101	72-123	1	30
1,1-Dichloropropene	0.13	U	0.13	4.0	ug/kg	104	104	77-120	1	30
cis-1,3-Dichloropropene	0.16	U	0.16	4.0	ug/kg	94	96	80-120	2	30
trans-1,3-Dichloropropene	0.17	U	0.17	4.0	ug/kg	95	94	77-120	1	30
Ethylbenzene	0.06	U	0.06	4.0	ug/kg	100	100	80-120	0	30
Freon 113	0.11	U	0.11	4.0	ug/kg	101	100	61-126	1	30
Freon 133a	0.50	U	0.50	5.0	ug/kg	85	85	78-120	1	30
Hexachlorobutadiene	0.14	U	0.14	4.0	ug/kg	90	91	57-120	1	30
2-Hexanone	1.6	U	1.6	8.0	ug/kg	95	93	45-155	3	30
Isopropylbenzene	0.06	U	0.06	4.0	ug/kg	101	100	76-120	1	30
p-Isopropyltoluene	0.11	U	0.11	4.0	ug/kg	99	100	75-120	1	30
Methyl Tertiary Butyl Ether	0.21	U	0.21	4.0	ug/kg	101	100	74-121	1	30
4-Methyl-2-pentanone	0.39	U	0.39	8.0	ug/kg	84	82	61-134	3	30
Methylene Chloride	1.0	J	0.24	4.0	ug/kg	99	100	76-124	1	30
n-Propylbenzene	0.07	U	0.07	4.0	ug/kg	101	101	77-120	0	30
Styrene	0.10	U	0.10	4.0	ug/kg	97	97	76-120	0	30
1,1,1,2-Tetrachloroethane	0.11	U	0.11	4.0	ug/kg	98	97	80-120	1	30
1,1,2,2-Tetrachloroethane	0.23	U	0.23	4.0	ug/kg	97	95	71-123	2	30
Tetrachloroethene	0.20	U	0.20	4.0	ug/kg	100	98	77-120	2	30
Toluene	0.08	U	0.08	4.0	ug/kg	101	100	80-120	0	30
1,2,3-Trichlorobenzene	0.14	U	0.14	4.0	ug/kg	92	92	64-120	0	30
1,2,4-Trichlorobenzene	0.18	U	0.18	4.0	ug/kg	90	91	68-120	0	30
1,1,1-Trichloroethane	0.20	U	0.20	4.0	ug/kg	103	101	71-125	2	30
1,1,2-Trichloroethane	0.27	U	0.27	4.0	ug/kg	99	96	80-120	2	30
Trichloroethene	0.15	U	0.15	4.0	ug/kg	101	100	80-120	0	30
Trichlorofluoromethane	0.29	U	0.29	4.0	ug/kg	86	85	58-133	1	30
1,2,3-Trichloropropane	0.33	U	0.33	4.0	ug/kg	99	95	71-123	4	30
1,2,4-Trimethylbenzene	0.40	U	0.40	4.0	ug/kg	98	99	79-120	1	30
1,3,5-Trimethylbenzene	0.10	U	0.10	4.0	ug/kg	98	98	78-120	0	30
Vinyl Chloride	0.20	U	0.20	4.0	ug/kg	88	88	53-120	0	30
m+p-Xylene	0.17	U	0.17	4.0	ug/kg	101	100	80-120	1	30
o-Xylene	0.17	U	0.17	4.0	ug/kg	98	96	80-120	2	30
Batch number: E103491AA	Sample number(s): 6163875									
1,4-Dioxane	0.5	U	0.5	2.0	ug/l	100	107	60-132	6	30
Batch number: E103493AA	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163886									
1,4-Dioxane	5.0	U	5.0	15	ug/kg	108	112	70-130	4	30
Batch number: Y103512AA	Sample number(s): 6163875									
Acetone	6	U	6.	20	ug/l	186	190	49-234	2	30
Benzene	0.5	U	0.5	5	ug/l	96	95	79-120	1	30
Bromobenzene	1	U	1.	5	ug/l	103	103	80-120	0	30
Bromochloromethane	1	U	1.	5	ug/l	94	92	80-120	2	30
Bromodichloromethane	1	U	1.	5	ug/l	91	91	80-120	0	30
Bromoform	1	U	1.	5	ug/l	93	92	61-120	2	30
Bromomethane	1	U	1.	5	ug/l	87	79	44-120	10	30
2-Butanone	3	U	3.	10	ug/l	125	130	66-151	4	30
n-Butylbenzene	1	U	1.	5	ug/l	100	100	74-120	1	30
sec-Butylbenzene	1	U	1.	5	ug/l	107	106	78-120	1	30
tert-Butylbenzene	1	U	1.	5	ug/l	97	97	80-120	0	30
Carbon Tetrachloride	1	U	1.	5	ug/l	99	96	75-123	3	30
Chlorobenzene	0.8	U	0.8	5	ug/l	94	95	80-120	0	30
Chloroethane	1	U	1.	5	ug/l	82	75	49-129	9	30
2-Chloroethyl Vinyl Ether	2	U	2.	10	ug/l	101	102	56-129	1	30
Chloroform	0.8	U	0.8	5	ug/l	98	96	77-122	2	30
Chloromethane	1	U	1.	5	ug/l	83	81	60-129	2	30
2-Chlorotoluene	1	U	1.	5	ug/l	104	103	80-120	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
4-Chlorotoluene	1	U	1.	5	ug/l	99	99	80-120	0	30
Chlorotrifluoroethene	2	U	2.	5	ug/l	73	76	38-136	4	30
1,2-Dibromo-3-chloropropane	2	U	2.	5	ug/l	105	108	66-120	3	30
Dibromochloromethane	1	U	1.	5	ug/l	94	94	80-120	1	30
1,2-Dibromoethane	1	U	1.	5	ug/l	97	99	80-120	2	30
Dibromomethane	1	U	1.	5	ug/l	94	93	80-120	1	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	96	95	80-120	1	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	102	100	80-120	2	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	99	98	80-120	1	30
Dichlorodifluoromethane	2	U	2.	5	ug/l	77	72	47-120	6	30
1,1-Dichloroethane	1	U	1.	5	ug/l	98	97	79-120	1	30
1,2-Dichloroethane	1	U	1.	5	ug/l	96	95	70-130	1	30
1,1-Dichloroethene	0.8	U	0.8	5	ug/l	100	103	74-123	4	30
cis-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	97	96	80-120	1	30
trans-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	95	95	80-120	0	30
1,2-Dichloropropane	1	U	1.	5	ug/l	93	93	78-120	0	30
1,3-Dichloropropane	1	U	1.	5	ug/l	98	99	80-120	1	30
2,2-Dichloropropane	1	U	1.	5	ug/l	91	90	77-124	2	30
1,1-Dichloropropene	1	U	1.	5	ug/l	98	95	80-120	2	30
cis-1,3-Dichloropropene	1	U	1.	5	ug/l	87	87	80-120	0	30
trans-1,3-Dichloropropene	1	U	1.	5	ug/l	93	92	79-120	0	30
Ethylbenzene	0.8	U	0.8	5	ug/l	98	97	79-120	2	30
Freon 113	2	U	2.	10	ug/l	112	115	69-128	3	30
Freon 133a	2	U	2.	5	ug/l	98	99	77-120	2	30
Hexachlorobutadiene	2	U	2.	5	ug/l	93	96	58-120	3	30
2-Hexanone	3	U	3.	10	ug/l	116	120	65-136	3	30
Isopropylbenzene	1	U	1.	5	ug/l	96	96	77-120	1	30
p-Isopropyltoluene	1	U	1.	5	ug/l	103	102	80-120	1	30
Methyl Tertiary Butyl Ether	0.5	U	0.5	5	ug/l	94	95	76-120	1	30
4-Methyl-2-pentanone	3	U	3.	10	ug/l	97	97	70-121	0	30
Methylene Chloride	2	U	2.	5	ug/l	98	100	80-120	3	30
n-Propylbenzene	1	U	1.	5	ug/l	110	108	80-120	1	30
Styrene	1	U	1.	5	ug/l	97	95	80-120	1	30
1,1,1,2-Tetrachloroethane	1	U	1.	5	ug/l	97	97	80-120	0	30
1,1,2,2-Tetrachloroethane	1	U	1.	5	ug/l	106	107	71-120	1	30
Tetrachloroethene	0.8	U	0.8	5	ug/l	98	97	80-121	1	30
Toluene	0.7	U	0.7	5	ug/l	98	98	79-120	0	30
1,2,3-Trichlorobenzene	1	U	1.	5	ug/l	95	97	65-120	2	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	95	97	67-120	2	30
1,1,1-Trichloroethane	0.8	U	0.8	5	ug/l	98	97	75-127	1	30
1,1,2-Trichloroethane	0.8	U	0.8	5	ug/l	100	100	80-120	0	30
Trichloroethene	1	U	1.	5	ug/l	94	92	80-120	2	30
Trichlorofluoromethane	2	U	2.	5	ug/l	89	89	64-129	0	30
1,2,3-Trichloropropane	1	U	1.	5	ug/l	109	109	80-120	0	30
1,2,4-Trimethylbenzene	1	U	1.	5	ug/l	105	104	74-120	1	30
1,3,5-Trimethylbenzene	1	U	1.	5	ug/l	103	102	75-120	1	30
Vinyl Chloride	1	U	1.	5	ug/l	79	78	65-125	1	30
m+p-Xylene	0.8	U	0.8	5	ug/l	93	93	80-120	1	30
o-Xylene	0.8	U	0.8	5	ug/l	94	94	80-120	0	30
Batch number: 10349WAI026	Sample number(s): 6163875									
Acenaphthene	0.010	U	0.010	0.050	ug/l	99	103	74-109	4	30
Acenaphthylene	0.010	U	0.010	0.050	ug/l	106	109	70-110	3	30
Anthracene	0.010	U	0.010	0.050	ug/l	106	109	66-111	2	30
Benzo(a)anthracene	0.010	U	0.010	0.050	ug/l	102	107	72-114	5	30
Benzo(a)pyrene	0.010	U	0.010	0.050	ug/l	101	104	64-115	3	30
Benzo(b)fluoranthene	0.010	U	0.010	0.050	ug/l	108	108	69-123	1	30
Benzo(g,h,i)perylene	0.010	U	0.010	0.050	ug/l	94	96	68-125	2	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzo(k)fluoranthene	0.010	U	0.010	0.050	ug/l	102	106	72-122	4	30
Butylbenzylphthalate	0.076	J	0.050	1.0	ug/l	100	102	70-130	1	30
Di-n-butylphthalate	0.13	J	0.050	1.0	ug/l	107	113	70-130	5	30
Chrysene	0.010	U	0.010	0.050	ug/l	103	104	76-116	0	30
Dibenz(a,h)anthracene	0.010	U	0.010	0.050	ug/l	93	96	71-125	3	30
Diethylphthalate	0.063	J	0.050	1.0	ug/l	113	115	70-130	2	30
Dimethylphthalate	0.050	U	0.050	1.0	ug/l	96	91	70-130	5	30
Bis(2-Ethylhexyl)phthalate	0.11	J	0.050	1.0	ug/l	114	123	70-130	8	30
Fluoranthene	0.010	U	0.010	0.050	ug/l	108	110	75-116	2	30
Fluorene	0.010	U	0.010	0.050	ug/l	106	108	75-114	2	30
Indeno(1,2,3-cd)pyrene	0.010	U	0.010	0.050	ug/l	94	96	69-124	2	30
1-Methylnaphthalene	0.010	U	0.010	0.050	ug/l	105	107	71-117	1	30
2-Methylnaphthalene	0.010	U	0.010	0.050	ug/l	95	97	75-115	2	30
Naphthalene	0.010	U	0.010	0.050	ug/l	100	102	72-109	2	30
N-Nitrosodimethylamine	0.010	U	0.010	0.050	ug/l	84	87	70-130	3	30
Di-n-octylphthalate	0.084	J	0.050	1.0	ug/l	102	112	70-130	9	30
Phenanthrene	0.010	U	0.010	0.050	ug/l	99	103	76-111	4	30
Pyrene	0.010	U	0.010	0.050	ug/l	102	106	69-118	3	30
Batch number: 10350WAB026	Sample number(s): 6163875									
Aniline	1	U	1.	5	ug/l	67	66	49-101	1	30
Benzidine	20	U	20.	60	ug/l	64	62	20-109	3	30
Benzoic acid	6	U	6.	15	ug/l	30	48	10-69	44*	30
Benzyl alcohol	5	U	5.	15	ug/l	79	91	66-97	14	30
4-Bromophenyl-phenylether	1	U	1.	5	ug/l	86	107	82-117	22	30
Carbazole	1	U	1.	5	ug/l	92	110	81-114	18	30
4-Chloro-3-methylphenol	1	U	1.	5	ug/l	89	112	70-123	22	30
4-Chloroaniline	1	U	1.	5	ug/l	51	58	42-124	14	30
bis(2-Chloroethoxy)methane	1	U	1.	5	ug/l	89	109	74-124	20	30
bis(2-Chloroethyl)ether	1	U	1.	5	ug/l	90	105	77-108	16	30
bis(2-Chloroisopropyl)ether	1	U	1.	5	ug/l	92	105	62-127	13	30
2-Chloronaphthalene	2	U	2.	5	ug/l	77	81	54-132	5	30
2-Chlorophenol	1	U	1.	5	ug/l	91	109*	77-108	18	30
4-Chlorophenyl-phenylether	2	U	2.	5	ug/l	90	111	82-111	21	30
Dibenzofuran	1	U	1.	5	ug/l	91	111*	83-108	20	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	84	94	67-108	12	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	83	93	63-110	12	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	82	93	65-113	12	30
3,3'-Dichlorobenzidine	2	U	2.	5	ug/l	53	57	49-111	9	30
2,4-Dichlorophenol	1	U	1.	5	ug/l	96	117*	80-109	20	30
2,4-Dimethylphenol	3	U	3.	10	ug/l	96	117*	72-110	20	30
3,5-Dimethylphenol	3	U	3.	10	ug/l	93	117	70-130	23	30
4,6-Dinitro-2-methylphenol	5	U	5.	15	ug/l	86	102	78-119	17	30
2,4-Dinitrophenol	10	U	10.	30	ug/l	77	91	64-120	16	30
2,4-Dinitrotoluene	1	U	1.	5	ug/l	93	110	81-115	17	30
2,6-Dinitrotoluene	1	U	1.	5	ug/l	90	110	85-115	20	30
1,2-Diphenylhydrazine	1	U	1.	5	ug/l	96	118*	78-116	21	30
Hexachlorobenzene	1	U	1.	5	ug/l	88	108	81-118	20	30
Hexachlorobutadiene	1	U	1.	5	ug/l	81	92	57-124	13	30
Hexachlorocyclopentadiene	5	U	5.	15	ug/l	71	77	10-118	8	30
Hexachloroethane	1	U	1.	5	ug/l	80	91	52-113	13	30
Isophorone	1	U	1.	5	ug/l	91	114	74-117	22	30
2-Methylphenol	1	U	1.	5	ug/l	85	102*	64-101	18	30
4-Methylphenol	2	U	2.	5	ug/l	76	93	61-103	21	30
2-Nitroaniline	1	U	1.	5	ug/l	91	111	83-116	20	30
3-Nitroaniline	1	U	1.	5	ug/l	88	101	74-113	14	30
4-Nitroaniline	1	U	1.	5	ug/l	74	82	59-100	11	30
Nitrobenzene	1	U	1.	5	ug/l	90	104	75-109	14	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2-Nitrophenol	1	U	1.	5	ug/l	91	108	86-120	18	30
4-Nitrophenol	10	U	10.	30	ug/l	44	53	16-78	19	30
N-Nitroso-di-n-propylamine	1	U	1.	5	ug/l	89	108	69-110	19	30
N-Nitrosodiphenylamine	2	U	2.	5	ug/l	91	111	67-136	20	30
Pentachlorophenol	3	U	3.	15	ug/l	75	84	53-110	12	30
Phenol	1	U	1.	5	ug/l	40	47	29-67	17	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	85	100	71-112	16	30
2,4,5-Trichlorophenol	1	U	1.	5	ug/l	90	108*	79-107	19	30
2,4,6-Trichlorophenol	1	U	1.	5	ug/l	93	110	81-113	17	30
Batch number: 10351SLB026	Sample number(s): 6163869-6163873,6163876-6163888									
Acenaphthene	17	U	17.	170	ug/kg	92		76-111		
Acenaphthylene	17	U	17.	170	ug/kg	95		75-122		
Aniline	170	U	170.	500	ug/kg	60		10-107		
Anthracene	17	U	17.	170	ug/kg	94		76-112		
Benzidine	1,200	U	1,200.	3,300	ug/kg	45		15-121		
Benzo(a)anthracene	17	U	17.	170	ug/kg	96		73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	85		69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	86		61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	81		65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	87		67-125		
Benzoic acid	170	U	170.	500	ug/kg	97		10-154		
Benzyl alcohol	170	U	170.	500	ug/kg	96		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	88		79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	103		75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	98		79-112		
Carbazole	17	U	17.	170	ug/kg	96		77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	94		74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	34		10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	94		70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	93		70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	95		68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	67		67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	94		72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	89		79-110		
Chrysene	17	U	17.	170	ug/kg	94		76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	83		70-128		
Dibenzofuran	17	U	17.	170	ug/kg	94		79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	85		79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	83		70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	85		74-106		
3,3'-Dichlorobenzidine	100	U	100.	330	ug/kg	54		38-105		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	96		75-111		
Diethylphthalate	28	J	17.	170	ug/kg	97		76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	98		72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	96		70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	94		77-109		
4,6-Dinitro-2-methylphenol	170	U	170.	500	ug/kg	80		53-110		
2,4-Dinitrophenol	670	U	670.	2,000	ug/kg	72		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	94		73-115		
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	91		79-115		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	102		77-111		
bis(2-Ethylhexyl)phthalate	18	J	17.	330	ug/kg	103		75-117		
Fluoranthene	17	U	17.	170	ug/kg	96		78-116		
Fluorene	17	U	17.	170	ug/kg	94		75-116		
Hexachlorobenzene	17	U	17.	170	ug/kg	90		78-116		
Hexachlorobutadiene	67	U	67.	170	ug/kg	79		70-112		
Hexachlorocyclopentadiene	170	U	170.	500	ug/kg	72		46-115		
Hexachloroethane	17	U	17.	170	ug/kg	80		68-105		
Indeno(1,2,3-cd)pyrene	17	U	17.	170	ug/kg	82		64-119		
Isophorone	17	U	17.	170	ug/kg	94		69-110		
1-Methylnaphthalene	17	U	17.	170	ug/kg	93		74-105		
2-Methylnaphthalene	17	U	17.	170	ug/kg	85		76-105		
2-Methylphenol	33	U	33.	170	ug/kg	98		66-110		
4-Methylphenol	33	U	33.	170	ug/kg	94		66-117		
Naphthalene	17	U	17.	170	ug/kg	90		73-106		
2-Nitroaniline	17	U	17.	170	ug/kg	93		78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	89		62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	71		49-98		
Nitrobenzene	17	U	17.	170	ug/kg	90		71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	86		81-114		
4-Nitrophenol	170	U	170.	500	ug/kg	87		56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	92		63-107		
N-Nitrosodimethylamine	33	U	33.	170	ug/kg	88		60-106		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	95		67-141		
Di-n-octylphthalate	17	U	17.	170	ug/kg	99		68-130		
Pentachlorophenol	170	U	170.	500	ug/kg	72		35-106		
Phenanthrene	17	U	17.	170	ug/kg	94		77-113		
Phenol	17	U	17.	170	ug/kg	92		58-112		
Pyrene	17	U	17.	170	ug/kg	97		75-115		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	86		73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	90		76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	89		78-111		

Batch number: 10351SLC026 Sample number(s): 6163869-6163873,6163876-6163888

Acenaphthene	0.67	U	0.67	1.7	ug/kg	86		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	90		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	92		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	86		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	87		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	104		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	94		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	85		66-137		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	97		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	94		84-132		
Chrysene	0.33	U	0.33	1.7	ug/kg	92		79-120		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	90		62-142		
Diethylphthalate	6.0	U	6.0	18	ug/kg	104		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	95		70-130		
Bis(2-Ethylhexyl)phthalate	6.3	J	6.0	18	ug/kg	102		67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	90		78-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	94		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	90		62-141		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	94		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	90		62-120		
Naphthalene	0.67	U	0.67	1.7	ug/kg	83		67-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	81		39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	90		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	86		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	94		56-121		
Batch number: 10354SLC026	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163886									
N-Nitrosodimethylamine	16.7	U	16.7	33.3	ng/kg	80		70-130		
Batch number: 10349A34A	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163886									
9a TPH by EPA 8015B Gas C5-C12	0.2	U	0.2	1.0	mg/kg	79	78	67-119	1	30
Batch number: 103550019A	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163886									
4-Amino-2,6-Dinitrotoluene	75	U	75.	150	ug/kg	106		80-120		
2-Amino-4,6-Dinitrotoluene	50	U	50.	150	ug/kg	107		80-120		
2,6-Diamino-4-nitrotoluene	100 U		100.	300	ug/kg	90	89	54-134	2	30
2,4-Diamino-6-nitrotoluene	100 U		100.	300	ug/kg	90	88	54-134	2	30
1,3-Dinitrobenzene	50	U	50.	150	ug/kg	106		51-171		
2,4-Dinitrotoluene	50	U	50.	150	ug/kg	103		72-135		
2,6-Dinitrotoluene	50	U	50.	150	ug/kg	108		80-120		
HMX	130 U		130.	380	ug/kg	83		74-130		
Nitrobenzene	50	U	50.	150	ug/kg	102		80-120		
Nitroglycerin	1,000 U		1,000.	3,000	ug/kg	94		80-120		
2-Nitrotoluene	100 U		100.	150	ug/kg	108		78-128		
3-Nitrotoluene	130 U		130.	150	ug/kg	109		73-127		
4-Nitrotoluene	100 U		100.	150	ug/kg	107		80-120		
PETN	1,000 U		1,000.	3,000	ug/kg	106		80-120		
RDX	63	U	63.	150	ug/kg	106		75-131		
Tetryl	77	U	77.	150	ug/kg	135		70-168		
1,3,5-Trinitrobenzene	50	U	50.	150	ug/kg	121		77-137		
2,4,6-Trinitrotoluene	50	U	50.	150	ug/kg	109		80-120		
Batch number: 103510021A	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163886									
17a Formaldehyde by 8315A	600 U		600.	1,500	ug/kg	100		80-126		
Batch number: 103490003A	Sample number(s): 6163875									
2,4-D	0.16	U	0.16	0.50	ug/l	112	108	45-128	4	30
Dalapon	0.25	U	0.25	1.3	ug/l	92	97	40-100	5	30
2,4-DB	0.30	U	0.30	1.0	ug/l	100	100	41-138	0	30
Dicamba	0.080	U	0.080	0.30	ug/l	108	112	51-144	4	30
Dinoseb	0.10	U	0.10	0.50	ug/l	53	42	23-93	24	30
2,4-DP (Dichlorprop)	0.16	U	0.16	0.50	ug/l	116	116	72-145	0	30
MCPA	300 U		300.	1,000	ug/l	92	72	69-129	24	30
MCPP	50	U	50.	200	ug/l	96	92	66-132	4	30
2,4,5-T	0.015	U	0.015	0.050	ug/l	104	108	53-141	4	30
2,4,5-TP	0.010	U	0.010	0.050	ug/l	100	96	56-135	4	30
Batch number: 103510026A	Sample number(s): 6163878-6163883,6163887-6163888									
2,4-D	1.2	U	1.2	3.6	ug/kg	118		40-140		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dalapon	4.4	U	4.4	9.0	ug/kg	83		24-89		
2,4-DB	1.2	J	0.62	1.7	ug/kg	95		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	86		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	8*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	106		60-141		
MCPA	76	U	76.	250	ug/kg	96		34-113		
MCPP (Mecoprop)	160 J		75.	250	ug/kg	112		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	99		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	89		48-138		
Batch number: 103490017A	Sample number(s): 6163879,6163887									
6a Perchlorate EPA 6850	2.1	U	2.1	5.0	ug/kg	98		85-115		
Batch number: 110040016A	Sample number(s): 6163884									
6a Perchlorate EPA 6850	2.1	U	2.1	5.0	ug/kg	105		85-115		
Batch number: 103500016A	Sample number(s): 6163875									
Aldrin	0.0020	U	0.0020	0.010	ug/l	96	101	54-159	5	30
Alpha BHC	0.0030	U	0.0030	0.010	ug/l	101	102	59-146	1	30
Beta BHC	0.0029	U	0.0029	0.010	ug/l	98	101	73-147	3	30
Gamma BHC - Lindane	0.0020	U	0.0020	0.010	ug/l	95	101	68-128	6	30
Chlordane	0.12	U	0.12	0.50	ug/l					
p,p-DDD	0.0050	U	0.0050	0.020	ug/l	100	110	71-139	10	30
p,p-DDE	0.0050	U	0.0050	0.020	ug/l	126	137*	66-130	8	30
p,p-DDT	0.0050	U	0.0050	0.020	ug/l	85	90	53-126	6	30
Delta BHC	0.0029	U	0.0029	0.010	ug/l	103	113	76-148	10	30
Dieldrin	0.0053	U	0.0053	0.020	ug/l	100	100	76-132	0	30
Endosulfan I	0.0043	U	0.0043	0.010	ug/l	78	83	68-128	6	30
Endosulfan II	0.015	U	0.015	0.020	ug/l	90	95	59-144	5	30
Endosulfan Sulfate	0.0058	U	0.0058	0.020	ug/l	95	100	71-142	5	30
Endrin	0.0081	U	0.0081	0.020	ug/l	85	85	52-132	0	30
Endrin Aldehyde	0.020	U	0.020	0.10	ug/l	105	110	68-139	5	20
Endrin Ketone	0.0050	U	0.0050	0.020	ug/l	90	105	69-146	15	30
Heptachlor	0.0026	U	0.0026	0.010	ug/l	93	102	57-126	9	30
Heptachlor Epoxide	0.0023	U	0.0023	0.010	ug/l	98	102	73-156	4	30
Methoxychlor	0.030	U	0.030	0.10	ug/l	91	97	52-133	6	30
Mirex	0.085	U	0.085	0.25	ug/l					
Toxaphene	1.0	U	1.0	3.0	ug/l					
Batch number: 103500017A	Sample number(s): 6163875									
Aroclor 5432	0.10	U	0.10	0.50	ug/l					
Aroclor 5442	0.10	U	0.10	0.50	ug/l	58*	56*	75-125	4	30
Aroclor 5460	0.10	U	0.10	0.50	ug/l					
PCB-1016	0.10	U	0.10	0.50	ug/l	102	100	68-119	2	30
PCB-1221	0.10	U	0.10	0.50	ug/l					
PCB-1232	0.20	U	0.20	0.50	ug/l					
PCB-1242	0.10	U	0.10	0.50	ug/l					
PCB-1248	0.10	U	0.10	0.50	ug/l					
PCB-1254	0.10	U	0.10	0.50	ug/l					
PCB-1260	0.10	U	0.10	0.50	ug/l	112	112	68-121	0	30
PCB-1262	0.20	U	0.20	0.50	ug/l					
PCB-1268	0.16	U	0.16	0.50	ug/l					
Batch number: 103510032A	Sample number(s): 6163869-6163873,6163876-6163888									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	60*	60*	75-125	0	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1016	0.33	U	0.33	1.7	ug/kg	86		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	101		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 103550006A	Sample number(s): 6163878-6163883,6163887-6163888									
Aldrin	0.066	U	0.066	0.17	ug/kg	61		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	58		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	78		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	76		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	92		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	102		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	126		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	84		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	99		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	94		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	110		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	108		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	123		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	58		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	106		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	85		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	84		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	131*		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					
Batch number: 103500005A	Sample number(s): 6163869-6163870,6163876									
Ethanol	100 U		100.	500	ug/kg	96		75-112		
Isopropanol	100 U		100.	500	ug/kg	93		75-125		
Methanol	110 J		100.	500	ug/kg	101		75-134		
Batch number: 103510008A	Sample number(s): 6163880									
Ethanol	100 U		100.	500	ug/kg	91		75-112		
Isopropanol	100 U		100.	500	ug/kg	87		75-125		
Methanol	100 U		100.	500	ug/kg	96		75-134		
Batch number: 103540002A	Sample number(s): 6163871-6163873,6163877,6163884-6163886									
Ethanol	100 U		100.	500	ug/kg	87		75-112		
Isopropanol	100 U		100.	500	ug/kg	90		75-125		
Methanol	100 U		100.	500	ug/kg	78		75-134		
Batch number: 103550026A	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163886									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
m-Terphenyl	1.5	U	1.5	3.5	mg/kg	99		75-125		
o-Terphenyl	1.5	U	1.5	3.5	mg/kg	102		75-125		
p-Terphenyl	1.5	U	1.5	3.5	mg/kg	98		75-125		
Batch number: 103511026001A	Sample number(s): 6163869-6163874,6163876-6163888									
Antimony	0.0600	U	0.0600	0.200	mg/kg	107		11-208		
Arsenic	0.0600	U	0.0600	0.400	mg/kg	95		80-120		
Beryllium	0.0160	U	0.0160	0.100	mg/kg	98		82-118		
Cadmium	0.0360	U	0.0360	0.100	mg/kg	92		82-118		
Chromium	0.120	U	0.120	0.400	mg/kg	98		80-120		
Cobalt	0.0200	U	0.0200	0.100	mg/kg	92		82-118		
Copper	0.0660	U	0.0660	0.400	mg/kg	105		80-120		
Lead	0.0104	U	0.0104	0.200	mg/kg	95		80-120		
Nickel	0.100	U	0.100	0.400	mg/kg	98		80-120		
Silver	0.0120	U	0.0120	0.100	mg/kg	95		66-134		
Thallium	0.0300	U	0.0300	0.100	mg/kg	101		81-119		
Vanadium	0.0220	U	0.0220	0.100	mg/kg	90		90-110		
Zinc	0.560	U	0.560	3.00	mg/kg	97		78-122		
Batch number: 103511026001B	Sample number(s): 6163869-6163874,6163876-6163888									
Selenium	0.0400	U	0.0400	0.400	mg/kg	99		79-122		
Batch number: 103511026001C	Sample number(s): 6163869-6163874,6163876-6163888									
Molybdenum	0.0500	U	0.0500	0.100	mg/kg	105		78-122		
Batch number: 103511026001D	Sample number(s): 6163869-6163874,6163876-6163888									
Barium	0.108	U	0.108	0.400	mg/kg	98		79-121		
Batch number: 103515708003	Sample number(s): 6163869-6163874,6163876-6163888									
Aluminum	5.03	U	5.03	20.0	mg/kg	93		61-110		
Boron	0.890	U	0.890	5.00	mg/kg	91		78-110		
Calcium	6.13	U	6.13	20.0	mg/kg	98		88-110		
Iron	4.71	U	4.71	20.0	mg/kg	106		61-110		
Lithium	0.22	U	0.22	2.0	mg/kg	102		80-120		
Magnesium	2.54	U	2.54	10.0	mg/kg	98		82-110		
Manganese	0.0780	U	0.0780	0.500	mg/kg	104		81-119		
Phosphorus	1.63	J	0.560	10.0	mg/kg	105		80-120		
Potassium	18.0	U	18.0	50.0	mg/kg	97		78-110		
Sodium	37.3	U	37.3	100	mg/kg	95		87-110		
Strontium	0.0620	U	0.0620	0.500	mg/kg	101		79-121		
Tin	1.28	J	1.00	10.0	mg/kg	105		90-114		
Titanium	0.380	U	0.380	1.00	mg/kg	102		80-120		
Zirconium	0.840	U	0.840	5.00	mg/kg	100		80-120		
Batch number: 103515711002	Sample number(s): 6163869-6163874,6163876-6163888									
Mercury	0.0028	U	0.0028	0.0976	mg/kg	94		88-123		
Batch number: 103545713001	Sample number(s): 6163875									
Mercury	0.000050	U	0.00005	0.00020	mg/l	97		80-120		
Batch number: 103551848003	Sample number(s): 6163875									
Aluminum	0.0834	U	0.0834	0.200	mg/l	96	92	90-112	4	20
Boron	0.0138	U	0.0138	0.0500	mg/l	97	94	90-110	3	20
Calcium	0.0960	J	0.0702	0.200	mg/l	102	99	90-112	3	20
Iron	0.0522	U	0.0522	0.200	mg/l	102	98	90-112	4	20
Lithium	0.0024	U	0.0024	0.0200	mg/l	100	98	80-120	2	20
Magnesium	0.0421	J	0.0172	0.100	mg/l	101	98	89-110	3	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Manganese	0.00084 U	0.00084	0.0050	mg/l	103	101	90-110	3	20
Phosphorus	0.0089 U	0.0089	0.100	mg/l	104	102	80-120	2	20
Potassium	0.239 U	0.239	0.500	mg/l	100	99	85-115	2	20
Sodium	0.433 U	0.433	1.00	mg/l	100	100	87-114	0	20
Strontium	0.00089 U	0.00089	0.0050	mg/l	100	97	90-110	3	20
Tin	0.0098 U	0.0098	0.0200	mg/l	103	101	90-110	2	20
Titanium	0.0038 U	0.0038	0.0100	mg/l	105	102	90-113	3	20
Zirconium	0.0206 U	0.0206	0.0500	mg/l	101	99	80-120	3	20
Batch number: 103556050002A	Sample number(s): 6163875								
Antimony	0.00030 U	0.00030	0.0010	mg/l	105	110	87-110	5	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	99	106	86-111	7	20
Beryllium	0.00013 U	0.00013	0.00050	mg/l	108	103	90-112	5	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	105	110	90-114	5	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	98	102	90-118	4	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	101	104	80-120	3	20
Copper	0.00038 U	0.00038	0.0020	mg/l	104	104	90-113	0	20
Lead	0.000052 U	0.00005 2	0.0010	mg/l	105	107	90-115	2	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	107	109	90-113	2	20
Silver	0.000080 U	0.00008 0	0.00050	mg/l	107	108	90-115	2	20
Thallium	0.00015 U	0.00015	0.00050	mg/l	101	101	89-116	0	20
Vanadium	0.00016 U	0.00016	0.00050	mg/l	104	108	80-120	4	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	109	105	80-120	4	20
Batch number: 103556050002B	Sample number(s): 6163875								
Selenium	0.00025 U	0.00025	0.0020	mg/l	107	107	85-114	0	20
Batch number: 103556050002C	Sample number(s): 6163875								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	106	103	80-120	2	20
Batch number: 103556050002D	Sample number(s): 6163875								
Barium	0.00038 U	0.00038	0.0020	mg/l	107	106	88-113	1	20
Batch number: 10348113001A	Sample number(s): 6163875								
3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	110	112*	90-110	2	20
Batch number: 10350196902A	Sample number(s): 6163875								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	100	100	90-110	0	20
Batch number: 10352658701A	Sample number(s): 6163875								
7b Perchlorate EPA 314.0	0.70 U	0.70	2.0	ug/l	90	91	85-115	1	20
Batch number: 10361102201A	Sample number(s): 6163869,6163871-6163872,6163874								
21a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	101		80-120		
Batch number: 10361102202A	Sample number(s): 6163870,6163876-6163877,6163880,6163884-6163886								
21a Cyanide by 9012B	0.13 U	0.13	0.50	mg/kg	105		80-120		
Batch number: 10364243201A	Sample number(s): 6163869-6163872,6163874,6163876-6163888								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	97		80-120		
Batch number: 11001001201A	Sample number(s): 6163869-6163872,6163874,6163876-6163882								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	104		85-115		
Batch number: 11001001201B	Sample number(s): 6163883-6163888								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	104		85-115		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11004004201A	Sample number(s): 6163869-6163872,6163874,6163876-6163882									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	110		90-110		
11a Anions by 300.0 - Nitrate	0.80	U	0.80	1.5	mg/kg	109		90-110		
Batch number: 11004004201B	Sample number(s): 6163883-6163888									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	110		90-110		
11a Anions by 300.0 - Nitrate	0.80	U	0.80	1.5	mg/kg	109		90-110		
Batch number: 10350039401A	Sample number(s): 6163869-6163871,6163874,6163876-6163881									
22a pH by 9045C						100		95-105		
Batch number: 10350039401B	Sample number(s): 6163882-6163888									
22a pH by 9045C						100		95-105		
Batch number: 10350182101A	Sample number(s): 6163869-6163871,6163874,6163876-6163881									
Oxidation Reduction Potential						100		98-102		
Batch number: 10350182101B	Sample number(s): 6163882-6163888									
Oxidation Reduction Potential						100		98-102		
Batch number: 10351020001A	Sample number(s): 6163875									
22b pH by 9040B						100		99-101		
Batch number: 10349162402B	Sample number(s): 6163878-6163879,6163881-6163883,6163887-6163888									
28a Moisture Content by 160.3						100		80-120		
Batch number: 10364162402B	Sample number(s): 6163869-6163874,6163876-6163877,6163880,6163884-6163886									
28a Moisture Content by 160.3						100		80-120		
28a Moisture Content by 160.3						100		80-120		
28a Moisture Content by 160.3						100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B103482AA	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163885 UNSPK: 6163871								
Acetone	169	181	15-210	3	30				
Benzene	99	95	55-143	8	30				
Bromobenzene	87	77	43-139	16	30				
Bromochloromethane	97	91	60-137	10	30				
Bromodichloromethane	96	90	53-136	10	30				
Bromoform	85	81	38-124	9	30				
Bromomethane	72	64	42-168	16	30				
2-Butanone	114	120	37-163	1	30				
n-Butylbenzene	82	67	30-146	24	30				
sec-Butylbenzene	87	73	33-157	21	30				
tert-Butylbenzene	88	74	41-152	20	30				
Carbon Tetrachloride	102	96	45-153	10	30				
Chlorobenzene	92	83	49-135	15	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chloroethane	78	68	39-152	18	30				
2-Chloroethyl Vinyl Ether	84	89	32-139	2	30				
Chloroform	103	96	61-142	10	30				
Chloromethane	77	72	51-163	10	30				
2-Chlorotoluene	89	77	42-146	18	30				
4-Chlorotoluene	88	75	39-145	19	30				
Chlorotrifluoroethene	104	104	70-130	2	30				
1,2-Dibromo-3-chloropropane	79	77	30-139	7	30				
Dibromochloromethane	93	88	51-128	10	30				
1,2-Dibromoethane	88	86	54-129	6	30				
Dibromomethane	94	90	57-130	8	30				
1,2-Dichlorobenzene	83	71	36-133	19	30				
1,3-Dichlorobenzene	81	69	34-134	19	30				
1,4-Dichlorobenzene	82	70	35-136	19	30				
Dichlorodifluoromethane	53	50	26-151	11	30				
1,1-Dichloroethane	101	96	63-142	9	30				
1,2-Dichloroethane	98	94	68-131	8	30				
1,1-Dichloroethene	101	97	61-149	7	30				
cis-1,2-Dichloroethene	98	93	60-136	9	30				
trans-1,2-Dichloroethene	99	92	59-142	11	30				
1,2-Dichloropropane	98	93	62-135	9	30				
1,3-Dichloropropane	94	90	58-129	8	30				
2,2-Dichloropropane	96	92	53-147	8	30				
1,1-Dichloropropene	97	93	54-145	8	30				
cis-1,3-Dichloropropene	85	83	51-131	6	30				
trans-1,3-Dichloropropene	87	83	49-129	8	30				
Ethylbenzene	92	83	44-141	15	30				
Freon 113	102	95	56-156	11	30				
Freon 133a	90	94	70-130	6	30				
Hexachlorobutadiene	65	51	10-155	28	30				
2-Hexanone	76	80	32-160	0	30				
Isopropylbenzene	89	78	38-144	17	30				
p-Isopropyltoluene	85	71	29-152	21	30				
Methyl Tertiary Butyl Ether	88	87	55-129	4	30				
4-Methyl-2-pentanone	66	70	46-139	3	30				
Methylene Chloride	99	87	61-141	16	30				
n-Propylbenzene	92	80	39-157	17	30				
Styrene	89	79	35-134	16	30				
1,1,1,2-Tetrachloroethane	97	87	52-130	15	30				
1,1,2,2-Tetrachloroethane	90	87	40-152	7	30				
Tetrachloroethene	94	84	42-149	14	30				
Toluene	97	90	50-146	11	30				
1,2,3-Trichlorobenzene	60	50	10-140	21	30				
1,2,4-Trichlorobenzene	61	50	10-136	24	30				
1,1,1-Trichloroethane	101	95	64-142	9	30				
1,1,2-Trichloroethane	93	89	54-139	9	30				
Trichloroethene	95	90	53-144	9	30				
Trichlorofluoromethane	88	81	47-163	12	30				
1,2,3-Trichloropropane	90	88	45-154	5	30				
1,2,4-Trimethylbenzene	89	76	37-149	19	30				
1,3,5-Trimethylbenzene	89	77	38-150	18	30				
Vinyl Chloride	78	74	50-154	9	30				
m+p-Xylene	93	82	44-137	16	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
o-Xylene	88	78	42-137	16	30				
Batch number: B103501AA	Sample number(s): 6163886 UNSPK: P164946								
Acetone	176		15-210						
Benzene	108		55-143						
Bromobenzene	92		43-139						
Bromochloromethane	98		60-137						
Bromodichloromethane	99		53-136						
Bromoform	87		38-124						
Bromomethane	80		42-168						
2-Butanone	125		37-163						
n-Butylbenzene	100		30-146						
sec-Butylbenzene	100		33-157						
tert-Butylbenzene	94		41-152						
Carbon Tetrachloride	108		45-153						
Chlorobenzene	99		49-135						
Chloroethane	86		39-152						
2-Chloroethyl Vinyl Ether	90		32-139						
Chloroform	106		61-142						
Chloromethane	101		51-163						
2-Chlorotoluene	97		42-146						
4-Chlorotoluene	97		39-145						
1,2-Dibromo-3-chloropropane	78		30-139						
Dibromochloromethane	94		51-128						
1,2-Dibromoethane	92		54-129						
Dibromomethane	97		57-130						
1,2-Dichlorobenzene	94		36-133						
1,3-Dichlorobenzene	92		34-134						
1,4-Dichlorobenzene	93		35-136						
Dichlorodifluoromethane	83		26-151						
1,1-Dichloroethane	108		63-142						
1,2-Dichloroethane	103		68-131						
1,1-Dichloroethene	114		61-149						
cis-1,2-Dichloroethene	105		60-136						
trans-1,2-Dichloroethene	109		59-142						
1,2-Dichloropropane	104		62-135						
1,3-Dichloropropane	97		58-129						
2,2-Dichloropropane	101		53-147						
1,1-Dichloropropene	108		54-145						
cis-1,3-Dichloropropene	91		51-131						
trans-1,3-Dichloropropene	88		49-129						
Ethylbenzene	101		44-141						
Freon 113	115		56-156						
Hexachlorobutadiene	88		10-155						
2-Hexanone	78		32-160						
Isopropylbenzene	100		38-144						
p-Isopropyltoluene	99		29-152						
Methyl Tertiary Butyl Ether	93		55-129						
4-Methyl-2-pentanone	68		46-139						
Methylene Chloride	101		61-141						
n-Propylbenzene	104		39-157						
Styrene	99		35-134						
1,1,1,2-Tetrachloroethane	99		52-130						

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,1,2,2-Tetrachloroethane	87		40-152						
Tetrachloroethene	101		42-149						
Toluene	104		50-146						
1,2,3-Trichlorobenzene	80		10-140						
1,2,4-Trichlorobenzene	81		10-136						
1,1,1-Trichloroethane	107		64-142						
1,1,2-Trichloroethane	95		54-139						
Trichloroethene	103		53-144						
Trichlorofluoromethane	94		47-163						
1,2,3-Trichloropropane	85		45-154						
1,2,4-Trimethylbenzene	98		37-149						
1,3,5-Trimethylbenzene	99		38-150						
Vinyl Chloride	91		50-154						
m+p-Xylene	102		44-137						
o-Xylene	96		42-137						
Batch number: E103493AA	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163886 UNSPK: 6163871								
1,4-Dioxane	104	95	70-130	9	30				
Batch number: 10351SLB026	Sample number(s): 6163869-6163873,6163876-6163888 UNSPK: 6163871								
Acenaphthene	96	83	75-115	15	30				
Acenaphthylene	98	85	49-126	15	30				
Aniline	58	44	14-114	27	30				
Anthracene	96	85	75-115	13	30				
Benzidine	38	23*	35-141	46*	30				
Benzo(a)anthracene	94	83	65-122	12	30				
Benzo(a)pyrene	87	75	57-126	15	30				
Benzo(b)fluoranthene	88	69	59-125	24	30				
Benzo(g,h,i)perylene	82	72	59-127	14	30				
Benzo(k)fluoranthene	89	82	56-132	8	30				
Benzoic acid	63	47	10-173	29	30				
Benzyl alcohol	97	88	55-123	10	30				
4-Bromophenyl-phenylether	91	80	67-129	13	30				
Butylbenzylphthalate	106	89	73-134	18	30				
Di-n-butylphthalate	101	86	67-123	16	30				
Carbazole	98	86	64-120	13	30				
4-Chloro-3-methylphenol	96	85	53-130	12	30				
4-Chloroaniline	43	37	23-95	14	30				
bis(2-Chloroethoxy)methane	93	84	54-117	10	30				
bis(2-Chloroethyl)ether	95	85	60-116	11	30				
bis(2-Chloroisopropyl)ether	98	88	55-142	11	30				
2-Chloronaphthalene	94	83	50-141	12	30				
2-Chlorophenol	97	88	73-121	10	30				
4-Chlorophenyl-phenylether	95	79	64-119	17	30				
Chrysene	98	85	62-128	14	30				
Dibenz(a,h)anthracene	83	73	65-125	13	30				
Dibenzofuran	97	84	71-112	14	30				
1,2-Dichlorobenzene	88	81	66-108	8	30				
1,3-Dichlorobenzene	85	78	63-109	9	30				
1,4-Dichlorobenzene	87	78	53-113	10	30				
3,3'-Dichlorobenzidine	37	32	25-123	13	30				
2,4-Dichlorophenol	99	88	78-117	12	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Diethylphthalate	98	84	66-118	15	30				
2,4-Dimethylphenol	98	87	56-130	12	30				
3,5-Dimethylphenol	101	91	70-130	10	30				
Dimethylphthalate	97	83	64-118	16	30				
4,6-Dinitro-2-methylphenol	78	62	10-148	22	30				
2,4-Dinitrophenol	53	37	20-143	35*	30				
2,4-Dinitrotoluene	97	84	57-114	15	30				
2,6-Dinitrotoluene	97	82	69-123	17	30				
1,2-Diphenylhydrazine	103	90	71-129	14	30				
bis(2-Ethylhexyl)phthalate	103	88	63-122	15	30				
Fluoranthene	98	86	59-122	13	30				
Fluorene	97	84	60-125	14	30				
Hexachlorobenzene	92	80	61-111	14	30				
Hexachlorobutadiene	81	73	62-120	10	30				
Hexachlorocyclopentadiene	72	61	10-153	17	30				
Hexachloroethane	84	74	57-109	13	30				
Indeno(1,2,3-cd)pyrene	83	72	61-126	14	30				
Isophorone	96	85	51-118	12	30				
1-Methylnaphthalene	94	85	73-112	10	30				
2-Methylnaphthalene	87	79	76-114	10	30				
2-Methylphenol	102	89	47-142	13	30				
4-Methylphenol	97	85	55-126	13	30				
Naphthalene	91	81	72-116	11	30				
2-Nitroaniline	96	83	67-125	15	30				
3-Nitroaniline	90	79	59-122	13	30				
4-Nitroaniline	74	63	52-112	16	30				
Nitrobenzene	92	83	51-114	11	30				
2-Nitrophenol	89	78	74-115	13	30				
4-Nitrophenol	92	77	39-133	17	30				
N-Nitroso-di-n-propylamine	95	84	60-116	12	30				
N-Nitrosodimethylamine	94	85	47-116	10	30				
N-Nitrosodiphenylamine	97	86	86-145	13	30				
Di-n-octylphthalate	104	85	56-126	20	30				
Pentachlorophenol	69	59	17-149	17	30				
Phenanthrene	97	84	65-125	14	30				
Phenol	95	85	58-126	11	30				
Pyrene	101	87	51-151	16	30				
1,2,4-Trichlorobenzene	87	79	72-115	9	30				
2,4,5-Trichlorophenol	91	78	34-139	16	30				
2,4,6-Trichlorophenol	94	77	49-140	20	30				
Batch number: 10351SLC026	Sample number(s): 6163869-6163873,6163876-6163888 UNSPK: 6163871								
Acenaphthene	84	87	63-105	3	30				
Acenaphthylene	90	95	55-126	5	30				
Anthracene	94	97	46-136	3	30				
Benzo(a)anthracene	90	93	39-144	3	30				
Benzo(a)pyrene	87	92	34-156	5	30				
Benzo(b)fluoranthene	102	105	43-155	3	30				
Benzo(g,h,i)perylene	47	51	33-141	8	30				
Benzo(k)fluoranthene	93	96	42-144	3	30				
Butylbenzylphthalate	104	103	73-140	1	30				
Di-n-butylphthalate	103	105	78-160	2	30				
Chrysene	90	93	29-156	3	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dibenz(a,h)anthracene	56	60	41-130	5	30				
Diethylphthalate	107	112	87-131	5	30				
Dimethylphthalate	96	100	74-118	5	30				
Bis(2-Ethylhexyl)phthalate	91	90	39-167	1	30				
Fluoranthene	101	104	26-166	3	30				
Fluorene	92	95	45-121	3	30				
Indeno(1,2,3-cd)pyrene	54	57	21-143	5	30				
1-Methylnaphthalene	86	88	72-123	2	30				
2-Methylnaphthalene	81	82	28-121	1	30				
Naphthalene	82	84	61-102	1	30				
N-Nitrosodimethylamine	79	80	48-113	1	30				
Di-n-octylphthalate	115	115	40-192	1	30				
Phenanthrene	86	87	12-165	1	30				
Pyrene	84	88	15-153	5	30				
Batch number: 10354SLC026	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163886 UNSPK: 6163871								
N-Nitrosodimethylamine	76	66*	70-130	13	30				
Batch number: 10349A34A	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163886 UNSPK: 6163871								
9a TPH by EPA 8015B Gas C5-C12	65	66	39-118	0	30				
Batch number: 103550019A	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163886 UNSPK: 6163871								
4-Amino-2,6-Dinitrotoluene	106	107	80-127	1	50				
2-Amino-4,6-Dinitrotoluene	105	105	80-137	0	50				
1,3-Dinitrobenzene	103	103	38-166	1	50				
2,4-Dinitrotoluene	100	101	80-131	0	50				
2,6-Dinitrotoluene	107	107	80-127	0	50				
HMX	81	83	63-128	2	50				
Nitrobenzene	100	100	80-125	0	50				
Nitroglycerin	94	93	80-120	0	50				
2-Nitrotoluene	106	105	80-122	1	50				
3-Nitrotoluene	107	106	72-119	1	50				
4-Nitrotoluene	106	106	80-125	0	50				
PETN	108	107	80-121	0	50				
RDX	97	99	75-129	2	50				
Tetryl	131	135	55-174	3	50				
1,3,5-Trinitrobenzene	118	119	82-126	0	50				
2,4,6-Trinitrotoluene	106	107	82-130	1	50				
Batch number: 103510021A	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163886 UNSPK: 6163871								
17a Formaldehyde by 8315A	97	99	80-120	2	50				
Batch number: 103510026A	Sample number(s): 6163878-6163883,6163887-6163888 UNSPK: 6163878								
2,4-D	140	79	28-161	56*	35				
Dalapon	47	100*	12-86	72*	50				
2,4-DB	188*	166	20-170	12	50				
Dicamba	5*	5*	33-120	0	50				
Dinoseb	41	44	1-44	8	35				
2,4-DP (Dichlorprop)	124	115	55-141	7	50				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
MCPA	232*	199*	31-184	15	50				
MCPP (Mecoprop)	102	89	16-174	10	50				
2,4,5-T	40	51	25-132	24	35				
2,4,5-TP	107	102	10-183	5	35				
Batch number: 103490017A	Sample number(s): 6163879,6163887 UNSPK: P162864								
6a Perchlorate EPA 6850	103	107	80-120	4	20				
Batch number: 110040016A	Sample number(s): 6163884 UNSPK: P167468								
6a Perchlorate EPA 6850	110	110	80-120	0	20				
Batch number: 103510032A	Sample number(s): 6163869-6163873,6163876-6163888 UNSPK: 6163871								
PCB-1016	102	111	29-146	9	50				
PCB-1260	114	115	39-149	1	50				
Batch number: 103550006A	Sample number(s): 6163878-6163883,6163887-6163888 UNSPK: P166190								
Aldrin	71	77	16-126	9	50				
Alpha BHC	88	94	10-129	7	50				
Beta BHC	84	100	14-147	17	50				
Gamma BHC - Lindane	94	100	10-140	6	50				
p,p-DDD	76	68	16-163	12	50				
p,p-DDE	106	111	18-161	4	50				
p,p-DDT	101	104	10-176	3	50				
Delta BHC	88	94	23-140	7	50				
Dieldrin	73	78	19-154	8	50				
Endosulfan I	76	79	16-137	4	50				
Endosulfan II	76	81	28-154	6	50				
Endosulfan Sulfate	133	86	21-160	43	50				
Endrin	95	86	11-149	10	50				
Endrin Aldehyde	47	73	10-148	43*	35				
Endrin Ketone	102	92	22-165	10	50				
Heptachlor	106	112	13-126	6	50				
Heptachlor Epoxide	77	81	13-157	4	50				
Methoxychlor	96	108	32-147	12	50				
Batch number: 103500005A	Sample number(s): 6163869-6163870,6163876 UNSPK: P163871								
Ethanol	83	83	24-143	0	20				
Isopropanol	84	82	75-125	3	20				
Methanol	74	86	45-136	14	20				
Batch number: 103510008A	Sample number(s): 6163880 UNSPK: 6163880								
Ethanol	81	72	24-143	12	20				
Isopropanol	86	84	75-125	2	20				
Methanol	90	80	45-136	12	20				
Batch number: 103540002A	Sample number(s): 6163871-6163873,6163877,6163884-6163886 UNSPK: 6163871								
Ethanol	82	84	24-143	3	20				
Isopropanol	84	85	75-125	1	20				
Methanol	75	86	45-136	14	20				
Batch number: 103550026A	Sample number(s): 6163869-6163873,6163876-6163877,6163880,6163884-6163886 UNSPK: 6163871								
m-Terphenyl	90	88	75-125	3	20				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
o-Terphenyl	93	91	75-125	2	20				
p-Terphenyl	95	93	75-125	2	20				
Batch number: 103511026001A	Sample number(s): 6163869-6163874,6163876-6163888 UNSPK: 6163871 BKG: 6163871								
Antimony	51*	58*	75-125	11	20	0.241	0.146 J	49* (1)	20
Arsenic	140*	155*	75-125	4	20	6.09	7.02	14	20
Beryllium	114	108	75-125	1	20	0.848	0.852	0	20
Cadmium	129*	138*	75-125	8	20	0.0957 J	0.106	10 (1)	20
Chromium	100	97	75-125	0	20	33.8	36.0	6	20
Cobalt	99	108	75-125	9	20	7.99	8.43	5	20
Copper	96	100	75-125	3	20	10.6	11.4	8	20
Lead	92	67*	75-125	7	20	8.37	8.40	0	20
Nickel	100	102	75-125	1	20	15.1	16.4	8	20
Silver	122	130*	75-125	9	20	0.0302 J	0.0232 J	26* (1)	20
Thallium	112	118	75-125	4	20	0.320	0.325	1 (1)	20
Vanadium	121 (2)	80 (2)	75-125	5	20	67.8	71.1	5	20
Zinc	98 (2)	152 (2)	75-125	7	20	72.0	79.8	10	20
Batch number: 103511026001B	Sample number(s): 6163869-6163874,6163876-6163888 UNSPK: 6163871 BKG: 6163871								
Selenium	107	114	75-125	7	20	0.265 J	0.235 J	12 (1)	20
Batch number: 103511026001C	Sample number(s): 6163869-6163874,6163876-6163888 UNSPK: 6163871 BKG: 6163871								
Molybdenum	118	133*	75-125	14	20	0.458	0.573	22* (1)	20
Batch number: 103511026001D	Sample number(s): 6163869-6163874,6163876-6163888 UNSPK: 6163871 BKG: 6163871								
Barium	63 (2)	102 (2)	75-125	3	20	114	123	8	20
Batch number: 103515708003	Sample number(s): 6163869-6163874,6163876-6163888 UNSPK: 6163871 BKG: 6163871								
Aluminum	1450 (2)	1167 (2)	75-125	2	20	21,000	18,500	13	20
Boron	94	93	84-115	2	20	6.30	5.83	8 (1)	20
Calcium	-144 (2)	-221 (2)	75-125	5	20	6,500	5,640	14	20
Iron	483 (2)	835 (2)	75-125	1	20	26,200	25,400	3	20
Lithium	96	95	82-114	2	20	25.7	22.1	15	20
Magnesium	-242 (2)	-219 (2)	75-125	1	20	6,230	5,230	18	20
Manganese	167 (2)	180 (2)	75-125	1	20	343	345	1	20
Phosphorus	54*	108	75-125	12	20	371	379	2	20
Potassium	134*	101	75-125	8	20	3,220	2,900	10	20
Sodium	93	93	75-125	1	20	175	156	12 (1)	20
Strontium	96	96	75-115	0	20	28.5	26.1	9	20
Tin	94	93	80-110	2	20	2.03 J	2.06 J	2 (1)	20
Titanium	528 (2)	467 (2)	75-125	4	20	1,090	1,230	12	20
Zirconium	94	94	75-125	1	20	3.38 J	4.05 J	18 (1)	20
Batch number: 103515711002	Sample number(s): 6163869-6163874,6163876-6163888 UNSPK: 6163871 BKG: 6163871								
Mercury	95	96	65-135	3	20	0.0028 U	0.0028 U	0 (1)	20
Batch number: 10361102201A	Sample number(s): 6163869,6163871-6163872,6163874 UNSPK: 6163871 BKG: 6163871								
21a Cyanide by 9012B	109		75-125			0.18 U	0.17 U	0 (1)	20
Batch number: 10361102202A	Sample number(s): 6163870,6163876-6163877,6163880,6163884-6163886 UNSPK: 6163885								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
	BKG: 6163885										
21a Cyanide by 9012B	100		75-125			0.18	U	0.18	U	0 (1)	20
Batch number: 10364243201A	Sample number(s): 6163869-6163872,6163874,6163876-6163888 UNSPK: 6163871 BKG: 6163871										
3a Cr VI by EPA 7199	99		75-125			0.23	J	0.31	J	32* (1)	20
Batch number: 11001001201A	Sample number(s): 6163869-6163872,6163874,6163876-6163882 UNSPK: 6163871 BKG: 6163871										
7a Perchlorate EPA 314.0	93		80-120			9.0	U	9.0	U	0 (1)	15
Batch number: 11001001201B	Sample number(s): 6163883-6163888 UNSPK: 6163883 BKG: 6163883										
7a Perchlorate EPA 314.0	95		80-120			9.0	U	9.0	U	0 (1)	15
Batch number: 11004004201A	Sample number(s): 6163869-6163872,6163874,6163876-6163882 UNSPK: 6163871 BKG: 6163871										
11a Anions by 300.0 - Fluoride	83		80-120			2.9		2.7		7 (1)	20
11a Anions by 300.0 - Nitrate	152*		80-120			11.5		10.3		11	20
Batch number: 11004004201B	Sample number(s): 6163883-6163888 UNSPK: 6163883 BKG: 6163883										
11a Anions by 300.0 - Fluoride	84		80-120			3.7		3.5		5 (1)	20
11a Anions by 300.0 - Nitrate	109		80-120			2.1		2.0		8 (1)	20
Batch number: 10350039401A	Sample number(s): 6163869-6163871,6163874,6163876-6163881 BKG: 6163871										
22a pH by 9045C						8.16		8.16		0	1
Batch number: 10350039401B	Sample number(s): 6163882-6163888 BKG: P164622										
22a pH by 9045C						8.38		8.39		0	1
Batch number: 10350182101A	Sample number(s): 6163869-6163871,6163874,6163876-6163881 BKG: 6163871										
Oxidation Reduction Potential						399		394		1	6
Batch number: 10350182101B	Sample number(s): 6163882-6163888 BKG: P164622										
Oxidation Reduction Potential						414		419		1	6
Batch number: 10351020001A	Sample number(s): 6163875 BKG: P165990										
22b pH by 9040B						6.8		6.8		0	1
Batch number: 10349162402B	Sample number(s): 6163878-6163879,6163881-6163883,6163887-6163888 BKG: 6163881										
28a Moisture Content by 160.3						8.5		8.8		4	20
Batch number: 10364162402B	Sample number(s): 6163869-6163874,6163876-6163877,6163880,6163884-6163886 BKG: 6163871										
28a Moisture Content by 160.3						11.4		11.7		3	20
28a Moisture Content by 160.3						11.4		11.7		3	20
28a Moisture Content by 160.3						11.4		11.7		3	20

Surrogate Quality Control

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 1a Volatile Organics EPA 8260B
Batch number: B103482AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6163869	106	102	97	92
6163870	105	100	99	88
6163871	107	108	96	93
6163872	100	100	102	98
6163873	101	103	101	98
6163876	104	101	97	91
6163877	104	100	97	92
6163880	104	101	100	88
6163884	105	102	97	93
6163885	104	100	98	92
Blank	104	102	96	92
LCS	101	105	100	100
MS	100	100	102	98
MSD	101	103	101	98
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 1a Volatile Organics EPA 8260B
Batch number: B103501AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6163886	105	105	98	93
Blank	104	101	97	93
LCS	100	103	99	100
LCSD	99	102	100	100
MS	100	97	102	101
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 14b 1,4-Dioxane by 8260B SIM
Batch number: E103491AA

	Toluene-d8
6163875	102
Blank	101
LCS	101
LCSD	101
Limits:	80-120

Analysis Name: 14a 1,4-Dioxane by 8260B SIM
Batch number: E103493AA

	Toluene-d8
6163869	101
6163870	100
6163871	100
6163872	101
6163873	100
6163876	102

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Surrogate Quality Control

6163877	101
6163880	100
6163884	100
6163885	101
6163886	99
Blank	99
LCS	99
LCSD	101
MS	101
MSD	100
Limits:	70-130

Analysis Name: 1b Volatile Organics EPA8260
Batch number: Y103512AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6163875	98	96	102	98
Blank	100	98	101	99
LCS	100	101	104	103
LCSD	97	97	103	102
Limits:	86-118	80-120	88-110	86-115

Analysis Name: 4b Select SVOC EPA 8270SIM
Batch number: 10349WAI026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6163875	125	90	102
Blank	101	97	108
LCS	103	93	99
LCSD	108	96	102
Limits:	40-130	45-130	45-135

Analysis Name: 5b Semivolatiles by EPA 8270C
Batch number: 10350WAB026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6163875	52	34	85	81	82	79
Blank	53	36	81	84	81	83
LCS	59	40	86	85	86	83
LCSD	71	48	103	102	105	99
Limits:	20-130	20-120	30-130	40-130	45-130	45-135

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 10351SLB026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6163869	95	91	80	83	84	81
6163870	88	85	73	79	79	80
6163871	97	93	85	86	87	87
6163872	95	89	84	85	87	86
6163873	86	82	73	79	77	75
6163876	98	93	77	85	84	85
6163877	98	95	79	88	86	86

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Surrogate Quality Control

6163878	92	89	76	82	81	80
6163879	93	90	77	82	83	81
6163880	96	93	73	84	85	82
6163881	92	89	74	81	84	80
6163882	91	89	73	82	85	78
6163883	84	81	68	77	78	76
6163884	95	92	78	85	89	85
6163885	92	89	75	85	87	81
6163886	91	89	72	82	82	83
6163887	93	91	78	86	88	82
6163888	96	94	81	88	88	87
Blank	91	90	79	85	85	81
LCS	91	88	81	85	85	82
MS	95	89	84	85	87	86
MSD	86	82	73	79	77	75
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10351SLC026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6163869	93	87	107
6163870	89	87	90
6163871	91	84	90
6163872	91	83	87
6163873	93	87	88
6163876	87	82	88
6163877	100	88	98
6163878	100	90	97
6163879	98	89	93
6163880	100	89	92
6163881	100	90	108
6163882	97	85	90
6163883	102	92	98
6163884	103	89	96
6163885	100	89	97
6163886	97	85	94
6163887	104	90	98
6163888	102	90	101
Blank	95	87	98
LCS	92	85	94
MS	91	83	87
MSD	93	87	88
Limits:	40-130	45-130	45-135

Analysis Name: 19a NDMA by 1625C
Batch number: 10354SLC026

	N-Nitrosodimethylamine-d6
6163869	106
6163870	110
6163871	101
6163872	101
6163873	97

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Surrogate Quality Control

6163876	115
6163877	105
6163880	73
6163884	103
6163885	100
6163886	120
Blank	118
LCS	118
MS	101
MSD	97

Limits: 50-150

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 10349A34A

	Trifluorotoluene-F
6163869	85
6163870	80
6163871	83
6163872	80
6163873	79
6163876	79
6163877	86
6163880	105
6163884	86
6163885	85
6163886	86
Blank	98
LCS	102
LCSD	99
MS	80
MSD	79

Limits: 61-122

Analysis Name: 13b Herbicides by EPA 8151
Batch number: 103490003A

	2,4-Dichlorophenylacetic acid
6163875	87
Blank	86
LCS	96
LCSD	112

Limits: 35-144

Analysis Name: 12b Pesticides by 8081A
Batch number: 103500016A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6163875	103	69
Blank	103	97
LCS	99	86
LCSD	104	91

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Surrogate Quality Control

Limits: 52-141 40-144

Analysis Name: 8b PCBs/PCTs by 8082
Batch number: 103500017A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6163875	119	93
Blank	123	119
LCS	117	114
LCSD	120	116
Limits:	30-150	45-120

Analysis Name: 17a Formaldehyde by 8315A
Batch number: 103510021A

	Butyraldehyde
6163869	111
6163870	102
6163871	108
6163872	105
6163873	104
6163876	90
6163877	110
6163880	106
6163884	97
6163885	105
6163886	103
Blank	100
LCS	105
MS	105
MSD	104
Limits:	64-126

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 103510026A

	2,4-Dichlorophenylacetic acid
6163878	116
6163879	114
6163880	89
6163881	101
6163882	108
6163883	96
6163887	137
6163888	99
Blank	113
LCS	100
MS	130
MSD	111
Limits:	36-156

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 103510032A

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Surrogate Quality Control

	Tetrachloro-m-xylene	Decachlorobiphenyl
6163869	69	105
6163870	82	97
6163871	118	126*
6163872	101	108
6163873	113	116
6163876	99	112
6163877	92	102
6163878	108	110
6163879	84	88
6163880	99	120
6163881	86	94
6163882	97	98
6163883	103	190*
6163884	91	97
6163885	87	104
6163886	94	100
6163887	109	116
6163888	115	110
Blank	100	106
LCS	91	96
LCSD	93	105
MS	101	108
MSD	113	116
Limits:	53-139	45-120

Analysis Name: 12a Pesticides by 8081A
Batch number: 103550006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6163878	66	103
6163879	64	98
6163880	78	101
6163881	73	94
6163882	77	42
6163883	70	70
6163887	71	135*
6163888	66	55
Blank	65	112
LCS	32*	108
MS	68	36
MSD	74	69
Limits:	50-130	20-120

Analysis Name: 20a Energetics by 8330A
Batch number: 103550019A

	2-Nitro-m-xylene
6163869	108
6163870	111
6163871	104
6163872	108
6163873	105
6163876	110

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Surrogate Quality Control

6163877	107
6163880	108
6163884	107
6163885	120
6163886	106
Blank	112
LCS	105
LCSD	102
MS	108
MSD	105

Limits: 80-146

Analysis Name: 25a Alcohols by 8015B
Batch number: 103500005A

	Acetone
6163869	83
6163870	81
6163876	75
Blank	92
LCS	88
MS	77
MSD	76

Limits: 42-138

Analysis Name: 25a Alcohols by 8015B
Batch number: 103510008A

	Acetone
6163880	96
Blank	97
LCS	91
MS	97
MSD	97

Limits: 42-138

Analysis Name: 25a Alcohols by 8015B
Batch number: 103540002A

	Acetone
6163871	85
6163872	82
6163873	85
6163877	89
6163884	91
6163885	89
6163886	83
Blank	93
LCS	90
MS	82
MSD	85

Limits: 42-138

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225274
Reported: 01/25/11 at 04:47 PM

Surrogate Quality Control

Analysis Name: 26a Terphenyls by 8015B
Batch number: 103550026A

	n-Triacontane-d62
6163869	91
6163870	92
6163871	91
6163872	91
6163873	93
6163876	92
6163877	102
6163880	92
6163884	94
6163885	94
6163886	94
Blank	97
LCS	94
MS	91
MSD	93
Limits:	50-150

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

#13013 1225274 G1G3869-88 Amended COC

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
***Primary Analyses as indicated on sample labels**
****Secondary Analyses as indicated on sample labels**
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: ***(Signature)***

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-EFH EPA 8015B Mod.	*Metals EPA 6010/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-007-SA5C-SB-4.0-5.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	
SL-007-SA5C-SB-9.0-10.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	
SL-007-SA5C-SB-9.5	12.13.10	1210	soil	none	5 Encore Samplers	x	x		x											x	x	x	x	x	x	x	x	x	
SL-071-SA5B-SS-0.0-0.5MS	12.13.10	1009	soil	none	2 x 16 oz. jarS & 2 6" sleeves			x			x	x	x	x	x	x		x	x										MS sample
SL-072-SA5B-SS-0.0-0.5	12.13.10	0948	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-073-SA5B-SS-0.0-0.5	12.13.10	0930	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-074-SA5B-SS-0.0-0.5	12.13.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-075-SA5B-SS-0.0-0.5	12.13.10	0903	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-076-SA5B-SS-0.0-0.5	12.13.10	0928	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-078-SA5B-SS-0.0-0.5	12.13.10	1110	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-083-SA5B-SS-0.0-0.5	12.13.10	1049	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-084-SA5B-SS-0.0-0.5	12.13.10	1046	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	5 Encore Samplers	x	x		x																				
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar					x										x	x	x	x	x	x	x	x	x	
SL-086-SA5B-SS-0.0-0.5	12.13.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-087-SA5B-SS-0.0-0.5	12.13.10	1317	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-089-SA5B-SS-0.0-0.5	12.13.10	1410	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-091-SA5B-SS-0.0-0.5	12.13.10	1510	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-092-SA5B-SS-0.0-0.5	12.13.10	1327	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-095-SA5B-SS-0.0-0.5	12.13.10	1440	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-103-SA5B-SS-0.0-0.5	12.13.10	1425	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-139-SA5B-SS-0.0-0.5	12.13.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-236-SA5B-SS-0.0-0.5	12.13.10	1310	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x	x	x	x										
SL-301-SA5B-SS-0.0-0.5	12.13.10	0900	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										

13013/1225274/G1G38869-88

CHAIN OF CUSTODY RECORD

Amended COC

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-EFH EPA 8015B Mod.	*Metals EPA 6010/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
DUP04-SA5B-QC-121310	12.13.10	1015	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										dup
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	dup
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	5 Encore Samplers	x	x		x																				dup
EB01-SA5B-121310	12.13.10	1215	water	none	6-1 liter amber			x						x	x			x	x										rinsate
EB01-SA5B-121310	12.13.10	1215	water	none	1-500 ml poly							x	x			x									x				rinsate
EB01-SA5B-121310	12.13.10	1215	water	HNO3	1-500 ml poly						x																		rinsate
EB01-SA5B-121310	12.13.10	1215	water	HCl	6-40 mL amber VOA vials	x	x																						rinsate
SED-029-SIV-SD-0.0-0.5	12.13.10	1152	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SED-030-SIV-SD-0.0-0.5	12.13.10	1113	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SED-031-SIV-SD-0.0-0.5	12.13.10	0920	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SED-032-SIV-SD-0.0-0.5	12.13.10	1457	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x	x	x	x										
SED-033-SIV-SD-0.0-0.5	12.13.10	1540	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SED-040-SIV-SD-0.0-0.5	12.13.10	1019	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x		x	x										
SL-001-SA5C-SB-4.0-5.0	12.13.10	1608	soil	none	3 x 4 oz. jars & 3 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	
SL-001-SA5C-SB-4.5	12.13.10	1604	soil	none	5 Encore Samplers	x	x		x																				
SL-001-SA5C-SB-9.0-10.0	12.13.10	1616	soil	none	3 x 4 oz. jars & 3 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	
SL-001-SA5C-SB-9.5	12.13.10	1612	soil	none	5 Encore Samplers	x	x		x																				
SL-003-SA5C-SB-4.0-5.0	12.13.10	1437	soil	none	3 x 4 oz. jars & 3 16 oz. jars			x		x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x	x	
SL-003-SA5C-SB-4.5	12.13.10	1433	soil	none	5 Encore Samplers	x	x		x																				
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	8 x 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	MS sample
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	4 x 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	MS sample
SL-006-SA5C-SB-4.5MS	12.13.10	0943	soil	none	15 Encore Samplers	x	x		x																				MS sample
SL-006-SA5C-SB-9.0-10.0	12.13.10	0955	soil	none	3 x 4 oz. jars & 3 16 oz. jars			x		x	x	x	x	x	x	x				x	x	x	x	x	x	x	x	x	
SL-006-SA5C-SB-9.5	12.13.10	0953	soil	none	5 Encore Samplers	x	x		x																				
SL-007-SA5B-SS-0.0-0.5	12.13.10	1004	soil	none	1 x 16 oz. jar & 1 6" sleeve			x			x	x	x	x	x	x	x	x	x										
~~SL-007-SA5C-SB-4.5~~	12.13.10	1200	soil	none	5 Encore Samplers	x	x		x																				

~~SL-007-SA5B-SS-~~ NLM ③ 1/5/11

→ SL-007-SA5C-SB-4.5 Updated per PB. NLM 1/5/11

13013 1225274 6163869-7988

AMO 12/14/10

CHAIN OF CUSTODY RECORD

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*VOCs/EPA 82608	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-EPH EPA 8015B Mod.	*Metals EPA 6010/6020/7471A	*Hex Chrome EPA 7199@	*Fluorides EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-006-SA5C-SB-9.0-10.0	12.13.10	0955	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	dup
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	8 x 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	MS sample
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	4 x 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	MS sample
EB-15-SA5B-121310	12.13.10	1215	water	none	6-1 liter amber			X						X	X			X	X										rinsate
EB-15-SA5B-121310	12.13.10	1215	water	none	1-500 ml poly							X	X			X													rinsate
EB-15-SA5B-121310	12.13.10	1215	water	HNO3	1-500 ml poly						X																		rinsate
EB-15-SA5B-121310	12.13.10	1215	water	HCl	6-40 mL amber VOA vials	X	X																						rinsate
SL-006-SA5C-SB-4.5MS	12.13.10	0943	soil	none	15 Encore Samplers	X	X		X																				MS sample
SL-006-SA5C-SB-9.5	12.13.10	0953	soil	none	5 Encore Samplers	X	X		X																				
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	5 Encore Samplers	X	X		X																				dup
SL-007-SA5C-SB-9.5	12.13.10	1210	soil	none	5 Encore Samplers	X	X		X																				
SL-007-SA5C-SB-4.0-5.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-007-SA5C-SB-9.0-10.0	12.13.10	1214	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-075-SA5B-SS-0.0-0.5	12.13.10	0903	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-007-SA5B-SS-0.0-0.5	12.13.10	1004	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-007-SA5B-SS-4.5	12.13.10	1200	soil	none	5 Encore Samplers	X	X		X																				
SL-078-SA5B-SS-0.0-0.5	12.13.10	1110	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-084-SA5B-SS-0.0-0.5	12.13.10	1046	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-076-SA5B-SS-0.0-0.5	12.13.10	0928	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-071-SA5B-SS-0.0-0.5MS	12.13.10	1009	soil	none	2 x 16 oz. jarS & 2 6" sleeves			X			X	X	X	X	X	X	X	X	X										MS sample
SL-139-SA5B-SS-0.0-0.5	12.13.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-083-SA5B-SS-0.0-0.5	12.13.10	1049	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-074-SA5B-SS-0.0-0.5	12.13.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-301-SA5B-SS-0.0-0.5	12.13.10	0900	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-073-SA5B-SS-0.0-0.5	12.13.10	0930	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-072-SA5B-SS-0.0-0.5	12.13.10	0948	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
DUP04-SA5B-QC-121310	12.13.10	1015	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										dup
SED-029-SIV-SD-0.0-0.5	12.13.10	1152	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-031-SIV-SD-0.0-0.5	12.13.10	0920	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-030-SIV-SD-0.0-0.5	12.13.10	1113	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-040-SIV-SD-0.0-0.5	12.13.10	1019	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-086-SA5B-SS-0.0-0.5	12.13.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-092-SA5B-SS-0.0-0.5	12.13.10	1327	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-103-SA5B-SS-0.0-0.5	12.13.10	1425	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-089-SA5B-SS-0.0-0.5	12.13.10	1410	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-236-SA5B-SS-0.0-0.5	12.13.10	1310	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	5 Encore Samplers	X	X		X																				
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. jar															X	X	X	X	X	X	X			
SL-087-SA5B-SS-0.0-0.5	12.13.10	1317	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-095-SA5B-SS-0.0-0.5	12.13.10	1440	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-091-SA5B-SS-0.0-0.5	12.13.10	1510	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-003-SA5C-SB-4.0-5.0	12.13.10	1437	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-003-SA5C-SB-4.5	12.13.10	1433	soil	none	5 Encore Samplers	X	X		X																				
SL-001-SA5C-SB-4.0-5.0	12.13.10	1608	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-001-SA5C-SB-9.0-10.0	12.13.10	1616	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-001-SA5C-SB-4.5	12.13.10	1604	soil	none	5 Encore Samplers	X	X		X																				
SL-001-SA5C-SB-9.5	12.13.10	1612	soil	none	5 Encore Samplers	X	X		X																				
SED-032-SIV-SD-0.0-0.5	12.13.10	1457	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-033-SIV-SD-0.0-0.5	12.13.10	1540	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	
	12/13/10 1630		12/14/10	Laboratory: Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time	Airbill No. 8079999 5007 32992	1005	6 coolers

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 01, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/14/2010
Group Number: 1225277
SDG: DX021
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-006-SA5C-SB-9.0-10.0 Soil	6163895
DUP13-SA5C-QC-121310 Soil	6163896
SL-006-SA5C-SB-4.0-5.0 Soil	6163897
SL-006-SA5C-SB-4.0-5.0MS Soil	6163898
SL-006-SA5C-SB-4.0-5.0MSD Soil	6163899
EB-15-SA5B-121310 Water	6163900
SL-007-SA5C-SB-4.0-5.0 Soil	6163901
SL-007-SA5C-SB-9.0-10.0 Soil	6163902
SL-075-SA5B-SS-0.0-0.5 Soil	6163903
SL-077-SA5B-SS-0.0-0.5 Soil	6163904
SL-085-SA5B-SS-0.0-0.5 Soil	6163905
SL-087-SA5B-SS-0.0-0.5 Soil	6163906
SL-095-SA5B-SS-0.0-0.5 Soil	6163907
SL-091-SA5B-SS-0.0-0.5 Soil	6163908
SL-003-SA5C-SB-4.0-5.0 Soil	6163909
SL-001-SA5C-SB-4.0-5.0 Soil	6163910
SL-001-SA5C-SB-9.0-10.0 Soil	6163911
SED-032-SIV-SD-0.0-0.5 Soil	6163912
SED-033-SIV-SD-0.0-0.5 Soil	6163913

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

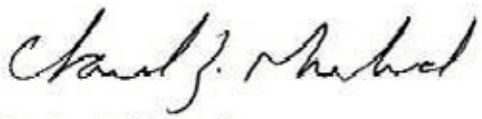
Analysis Report

ELECTRONIC COPY TO CDM Federal Services Program Attn: Todd Burgesser

1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Charles J. Neslund
Manager

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-9.0-10.0

LLI Sample # SW 6163895
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0691 SDG#: DX021-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-9.0-10.0

LLI Sample # SW 6163895
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0691 SDG#: DX021-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0145 U	0.0145	1.09	1
11031	12378-PeCDD	40321-76-4	0.0346 JBQ	0.0166	5.45	1
11031	123478-HxCDD	39227-28-6	0.0471 JBQ	0.0176	5.45	1
11031	123678-HxCDD	57653-85-7	0.204 JB	0.0182	5.45	1
11031	123789-HxCDD	19408-74-3	0.197 JB	0.0174	5.45	1
11031	1234678-HpCDD	35822-46-9	5.23 JB	0.0326	5.45	1
11031	OCDD	3268-87-9	83.4 B	0.0270	10.9	1
11031	2378-TCDF	51207-31-9	0.0321 JBQ	0.0144	1.09	1
11031	12378-PeCDF	57117-41-6	0.0757 JB	0.00773	5.45	1
11031	23478-PeCDF	57117-31-4	0.137 JBQ	0.00784	5.45	1
11031	123478-HxCDF	70648-26-9	0.163 JB	0.0132	5.45	1
11031	123678-HxCDF	57117-44-9	0.143 JB	0.0107	5.45	1
11031	123789-HxCDF	72918-21-9	0.0937 JB	0.0159	5.45	1
11031	234678-HxCDF	60851-34-5	0.241 JB	0.0124	5.45	1
11031	1234678-HpCDF	67562-39-4	0.955 JB	0.0101	5.45	1
11031	1234789-HpCDF	55673-89-7	0.145 JB	0.0186	5.45	1
11031	OCDF	39001-02-0	1.53 JB	0.0236	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	50	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-9.0-10.0

LLI Sample # SW 6163895
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0691 SDG#: DX021-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-006-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-9.0-10.0

LLI Sample # SW 6163895
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:55 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0691 SDG#: DX021-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 16:11	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163896
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP13 SDG#: DX021-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	12.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163896
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP13 SDG#: DX021-02FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0165	U	0.0165	1.15	1
11031	12378-PeCDD	40321-76-4	0.0649	JBQ	0.0263	5.73	1
11031	123478-HxCDD	39227-28-6	0.0401	JBQ	0.0172	5.73	1
11031	123678-HxCDD	57653-85-7	0.287	JB	0.0173	5.73	1
11031	123789-HxCDD	19408-74-3	0.447	JB	0.0174	5.73	1
11031	1234678-HpCDD	35822-46-9	1.03	JB	0.0240	5.73	1
11031	OCDD	3268-87-9	8.45	JB	0.0242	11.5	1
11031	2378-TCDF	51207-31-9	0.0368	JB	0.0216	1.15	1
11031	12378-PeCDF	57117-41-6	0.334	JBQ	0.00952	5.73	1
11031	23478-PeCDF	57117-31-4	0.143	JBQ	0.0106	5.73	1
11031	123478-HxCDF	70648-26-9	0.160	JB	0.0174	5.73	1
11031	123678-HxCDF	57117-44-9	0.115	JBQ	0.0138	5.73	1
11031	123789-HxCDF	72918-21-9	0.512	JB	0.0242	5.73	1
11031	234678-HxCDF	60851-34-5	0.237	JBQ	0.0162	5.73	1
11031	1234678-HpCDF	67562-39-4	0.677	JB	0.0109	5.73	1
11031	1234789-HpCDF	55673-89-7	0.139	JBQ	0.0231	5.73	1
11031	OCDF	39001-02-0	0.898	JBQ	0.0275	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	66	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163896
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP13 SDG#: DX021-02FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP13-SA5C-QC-121310 Soil
SSFL Area IV Collocated Soil Sampling
DUP13-SA5C-QC-121310

LLI Sample # SW 6163896
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:10 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP13 SDG#: DX021-02FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 17:07	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163897
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0645 SDG#: DX021-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163897
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0645 SDG#: DX021-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0249 JBQ	0.0191	1.13	1
11031	12378-PeCDD	40321-76-4	0.0742 JB	0.0274	5.64	1
11031	123478-HxCDD	39227-28-6	0.0294 JBQ	0.0219	5.64	1
11031	123678-HxCDD	57653-85-7	0.362 JB	0.0227	5.64	1
11031	123789-HxCDD	19408-74-3	0.510 JBQ	0.0223	5.64	1
11031	1234678-HpCDD	35822-46-9	2.54 JB	0.0331	5.64	1
11031	OCDD	3268-87-9	25.4 B	0.0332	11.3	1
11031	2378-TCDF	51207-31-9	0.0498 JBQ	0.0242	1.13	1
11031	12378-PeCDF	57117-41-6	0.294 JB	0.0125	5.64	1
11031	23478-PeCDF	57117-31-4	0.100 JBQ	0.0120	5.64	1
11031	123478-HxCDF	70648-26-9	0.0520 JB	0.0181	5.64	1
11031	123678-HxCDF	57117-44-9	0.0857 JB	0.0166	5.64	1
11031	123789-HxCDF	72918-21-9	0.445 JB	0.0220	5.64	1
11031	234678-HxCDF	60851-34-5	0.0838 JBQ	0.0170	5.64	1
11031	1234678-HpCDF	67562-39-4	0.428 JB	0.0140	5.64	1
11031	1234789-HpCDF	55673-89-7	0.0739 JBQ	0.0249	5.64	1
11031	OCDF	39001-02-0	0.999 JB	0.0328	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	69	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*

*=This limit was used in the evaluation of the final result

Sample Description: **SL-006-SA5C-SB-4.0-5.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163897
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0645 SDG#: DX021-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163897
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0645 SDG#: DX021-03BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 18:04	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163898
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0645 SDG#: DX021-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163898
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0645 SDG#: DX021-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.7	B	0.0233	1.13	1
11031	12378-PeCDD	40321-76-4	116	B	0.0729	5.64	1
11031	123478-HxCDD	39227-28-6	117	B	0.0677	5.64	1
11031	123678-HxCDD	57653-85-7	119	B	0.0646	5.64	1
11031	123789-HxCDD	19408-74-3	120	B	0.0448	5.64	1
11031	1234678-HpCDD	35822-46-9	117	B	0.0891	5.64	1
11031	OCDD	3268-87-9	250	B	0.0648	11.3	1
11031	2378-TCDF	51207-31-9	25.1	B	0.0501	1.13	1
11031	12378-PeCDF	57117-41-6	120	B	0.0288	5.64	1
11031	23478-PeCDF	57117-31-4	118	B	0.0374	5.64	1
11031	123478-HxCDF	70648-26-9	112	B	0.0939	5.64	1
11031	123678-HxCDF	57117-44-9	114	B	0.0772	5.64	1
11031	123789-HxCDF	72918-21-9	113	B	0.0612	5.64	1
11031	234678-HxCDF	60851-34-5	113	B	0.0595	5.64	1
11031	1234678-HpCDF	67562-39-4	115	B	0.0781	5.64	1
11031	1234789-HpCDF	55673-89-7	115	B	0.0916	5.64	1
11031	OCDF	39001-02-0	235	B	0.0833	11.3	1

The recoveries of several labeled compounds were low in this sample. However, the recovery of all of the spiked, native compounds were within specifications.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	52	25 - 164
13C12-12378-PeCDD	29	25 - 181
13C12-123478-HxCDD	24	32 - 141
13C12-123678-HxCDD	25	28 - 130
13C12-123789-HxCDD	37	28 - 130
13C12-1234678-HpCDD	34	23 - 140
13C12-OCDD	34	17 - 157
13C12-2378-TCDF	30	24 - 169
13C12-12378-PeCDF	34	24 - 185
13C12-23478-PeCDF	25	21 - 178
13C12-123478-HxCDF	21	26 - 152
13C12-123678-HxCDF	25	26 - 123
13C12-234678-HxCDF	32	28 - 136
13C12-123789-HxCDF	37	29 - 147
13C12-1234678-HpCDF	30	28 - 143
13C12-1234789-HpCDF	31	26 - 138
13C12-OCDF	27	17 - 157
13C12-1278-TCDD (CRS)	18	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163898
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0645 SDG#: DX021-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0MS Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163898
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0645 SDG#: DX021-03MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 19:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163899
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0645 SDG#: DX021-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163899
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0645 SDG#: DX021-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.8	B	0.0231	1.13	1
11031	12378-PeCDD	40321-76-4	118	B	0.0423	5.64	1
11031	123478-HxCDD	39227-28-6	121	B	0.0344	5.64	1
11031	123678-HxCDD	57653-85-7	118	B	0.0351	5.64	1
11031	123789-HxCDD	19408-74-3	118	B	0.0344	5.64	1
11031	1234678-HpCDD	35822-46-9	125	B	0.0668	5.64	1
11031	OCDD	3268-87-9	314	B	0.0564	11.3	1
11031	2378-TCDF	51207-31-9	24.0	B	0.0312	1.13	1
11031	12378-PeCDF	57117-41-6	120	B	0.0174	5.64	1
11031	23478-PeCDF	57117-31-4	119	B	0.0173	5.64	1
11031	123478-HxCDF	70648-26-9	114	B	0.0429	5.64	1
11031	123678-HxCDF	57117-44-9	114	B	0.0386	5.64	1
11031	123789-HxCDF	72918-21-9	114	B	0.0499	5.64	1
11031	234678-HxCDF	60851-34-5	113	B	0.0410	5.64	1
11031	1234678-HpCDF	67562-39-4	115	B	0.0430	5.64	1
11031	1234789-HpCDF	55673-89-7	114	B	0.0598	5.64	1
11031	OCDF	39001-02-0	231	B	0.0405	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	67	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163899
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0645 SDG#: DX021-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-006-SA5C-SB-4.0-5.0MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-006-SA5C-SB-4.0-5.0

LLI Sample # SW 6163899
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:45 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0645 SDG#: DX021-03MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 19:57	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB-15-SA5B-121310 Water
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163900
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DEB15 SDG#: DX021-04EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	3.48	U	3.48	2.30	1
10915	12378-PeCDD	40321-76-4	2.02	JB	1.28	11.5	1
10915	123478-HxCDD	39227-28-6	0.514	JB	0.440	11.5	1
10915	123678-HxCDD	57653-85-7	1.01	JB	0.449	11.5	1
10915	123789-HxCDD	19408-74-3	0.622	JB	0.496	11.5	1
10915	1234678-HpCDD	35822-46-9	1.77	JBQ	0.456	11.5	1
10915	OCDD	3268-87-9	7.38	JB	0.505	23.0	1
10915	2378-TCDF	51207-31-9	0.355	U	0.355	2.30	1
10915	12378-PeCDF	57117-41-6	0.591	JB	0.334	11.5	1
10915	23478-PeCDF	57117-31-4	0.623	JB	0.289	11.5	1
10915	123478-HxCDF	70648-26-9	1.09	JBQ	0.295	11.5	1
10915	123678-HxCDF	57117-44-9	0.846	JBQ	0.280	11.5	1
10915	123789-HxCDF	72918-21-9	0.654	JB	0.304	11.5	1
10915	234678-HxCDF	60851-34-5	1.13	JB	0.272	11.5	1
10915	1234678-HpCDF	67562-39-4	3.04	JB	0.258	11.5	1
10915	1234789-HpCDF	55673-89-7	0.663	JB	0.290	11.5	1
10915	OCDF	39001-02-0	1.71	JB	0.506	23.0	1

The recoveries of several labeled compounds were outside QC limits in this sample and the blank and OPR associated with this sample. The sample was re-extracted outside the project specified holding time with all labeled compound recoveries within QC specification. Comparable native compound results were observed between the two extractions.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	3	25 - 164
13C12-12378-PeCDD	15	25 - 181
13C12-123478-HxCDD	24	32 - 141
13C12-123678-HxCDD	23	28 - 130
13C12-123789-HxCDD	21	28 - 130
13C12-1234678-HpCDD	30	23 - 140
13C12-OCDD	29	17 - 157
13C12-2378-TCDF	33	24 - 169
13C12-12378-PeCDF	29	24 - 185
13C12-23478-PeCDF	34	21 - 178
13C12-123478-HxCDF	27	26 - 152
13C12-123678-HxCDF	27	26 - 123
13C12-234678-HxCDF	29	28 - 136
13C12-123789-HxCDF	29	29 - 147
13C12-1234678-HpCDF	29	28 - 143
13C12-1234789-HpCDF	29	26 - 138
13C12-OCDF	28	17 - 157
13C12-1278-TCDD (CRS)	9	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **EB-15-SA5B-121310 Water**
SSFL Area IV Collocated Soil Sampling
EB-15-SA5B-121310

LLI Sample # WW 6163900
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:15 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DEB15 SDG#: DX021-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor

E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	10362001	12/30/2010 17:25	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	10362001	12/28/2010 06:30	Ginelle L Haines	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163901
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0745 SDG#: DX021-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163901
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0745 SDG#: DX021-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0234	U	0.0234	1.09	1
11031	12378-PeCDD	40321-76-4	0.0864	JBQ	0.0310	5.44	1
11031	123478-HxCDD	39227-28-6	0.112	JB	0.0271	5.44	1
11031	123678-HxCDD	57653-85-7	0.321	JBQ	0.0283	5.44	1
11031	123789-HxCDD	19408-74-3	0.285	JB	0.0271	5.44	1
11031	1234678-HpCDD	35822-46-9	5.76	B	0.0404	5.44	1
11031	OCDD	3268-87-9	58.1	B	0.0412	10.9	1
11031	2378-TCDF	51207-31-9	0.0301	U	0.0301	1.09	1
11031	12378-PeCDF	57117-41-6	0.164	JBQ	0.0150	5.44	1
11031	23478-PeCDF	57117-31-4	0.241	JBQ	0.0159	5.44	1
11031	123478-HxCDF	70648-26-9	0.177	JB	0.0220	5.44	1
11031	123678-HxCDF	57117-44-9	0.135	JBQ	0.0183	5.44	1
11031	123789-HxCDF	72918-21-9	0.231	JB	0.0260	5.44	1
11031	234678-HxCDF	60851-34-5	0.247	JBQ	0.0212	5.44	1
11031	1234678-HpCDF	67562-39-4	1.17	JB	0.0161	5.44	1
11031	1234789-HpCDF	55673-89-7	0.246	JB	0.0285	5.44	1
11031	OCDF	39001-02-0	2.06	JB	0.0337	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163901
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0745 SDG#: DX021-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-007-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-4.0-5.0

LLI Sample # SW 6163901
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0745 SDG#: DX021-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 20:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163902
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0791 SDG#: DX021-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	9.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163902
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0791 SDG#: DX021-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0237 JBQ	0.0225	1.10	1
11031	12378-PeCDD	40321-76-4	0.119 JBQ	0.0322	5.51	1
11031	123478-HxCDD	39227-28-6	0.126 JB	0.0326	5.51	1
11031	123678-HxCDD	57653-85-7	0.557 JB	0.0347	5.51	1
11031	123789-HxCDD	19408-74-3	0.353 JB	0.0331	5.51	1
11031	1234678-HpCDD	35822-46-9	14.7 B	0.0655	5.51	1
11031	OCDD	3268-87-9	179 B	0.0656	11.0	1
11031	2378-TCDF	51207-31-9	0.0249 U	0.0249	1.10	1
11031	12378-PeCDF	57117-41-6	0.0980 JB	0.0144	5.51	1
11031	23478-PeCDF	57117-31-4	0.144 JB	0.0139	5.51	1
11031	123478-HxCDF	70648-26-9	0.116 JB	0.0216	5.51	1
11031	123678-HxCDF	57117-44-9	0.128 JB	0.0195	5.51	1
11031	123789-HxCDF	72918-21-9	0.170 JBQ	0.0240	5.51	1
11031	234678-HxCDF	60851-34-5	0.162 JB	0.0206	5.51	1
11031	1234678-HpCDF	67562-39-4	1.71 JB	0.0163	5.51	1
11031	1234789-HpCDF	55673-89-7	0.194 JB	0.0227	5.51	1
11031	OCDF	39001-02-0	4.77 JB	0.0316	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	64	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163902
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0791 SDG#: DX021-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-007-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-007-SA5C-SB-9.0-10.0

LLI Sample # SW 6163902
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 12:14 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0791 SDG#: DX021-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 21:50	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163903
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D7505 SDG#: DX021-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163903
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D7505 SDG#: DX021-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0679	JBQ	0.0182	1.06	1
11031	12378-PeCDD	40321-76-4	0.518	JB	0.0419	5.32	1
11031	123478-HxCDD	39227-28-6	0.909	JB	0.0286	5.32	1
11031	123678-HxCDD	57653-85-7	2.30	JB	0.0291	5.32	1
11031	123789-HxCDD	19408-74-3	2.31	JB	0.0298	5.32	1
11031	1234678-HpCDD	35822-46-9	54.7	B	0.0776	5.32	1
11031	OCDD	3268-87-9	502	B	0.0634	10.6	1
11031	2378-TCDF	51207-31-9	0.214	JB	0.0339	1.06	1
11031	12378-PeCDF	57117-41-6	0.378	JB	0.0142	5.32	1
11031	23478-PeCDF	57117-31-4	0.435	JB	0.0145	5.32	1
11031	123478-HxCDF	70648-26-9	0.629	JB	0.0263	5.32	1
11031	123678-HxCDF	57117-44-9	0.613	JB	0.0232	5.32	1
11031	123789-HxCDF	72918-21-9	0.467	JB	0.0317	5.32	1
11031	234678-HxCDF	60851-34-5	0.706	JB	0.0258	5.32	1
11031	1234678-HpCDF	67562-39-4	9.65	B	0.0234	5.32	1
11031	1234789-HpCDF	55673-89-7	0.847	JB	0.0361	5.32	1
11031	OCDF	39001-02-0	25.3	B	0.0284	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-075-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163903
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D7505 SDG#: DX021-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-075-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5B-SS-0.0-0.5

LLI Sample # SW 6163903
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 09:03 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D7505 SDG#: DX021-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/14/2011 22:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163904
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0705 SDG#: DX021-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	7.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163904
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0705 SDG#: DX021-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0969	JB	0.0178	1.08	1
11031	12378-PeCDD	40321-76-4	0.290	JB	0.0311	5.38	1
11031	123478-HxCDD	39227-28-6	0.443	JB	0.0297	5.38	1
11031	123678-HxCDD	57653-85-7	0.946	JB	0.0310	5.38	1
11031	123789-HxCDD	19408-74-3	0.884	JB	0.0301	5.38	1
11031	1234678-HpCDD	35822-46-9	21.8	B	0.0487	5.38	1
11031	OCDD	3268-87-9	179	B	0.0531	10.8	1
11031	2378-TCDF	51207-31-9	0.220	JB	0.0263	1.08	1
11031	12378-PeCDF	57117-41-6	0.247	JB	0.0121	5.38	1
11031	23478-PeCDF	57117-31-4	0.329	JB	0.0135	5.38	1
11031	123478-HxCDF	70648-26-9	0.378	JB	0.0250	5.38	1
11031	123678-HxCDF	57117-44-9	0.373	JB	0.0202	5.38	1
11031	123789-HxCDF	72918-21-9	0.236	JB	0.0322	5.38	1
11031	234678-HxCDF	60851-34-5	0.501	JB	0.0237	5.38	1
11031	1234678-HpCDF	67562-39-4	3.96	JB	0.0167	5.38	1
11031	1234789-HpCDF	55673-89-7	0.478	JB	0.0318	5.38	1
11031	OCDF	39001-02-0	7.92	JB	0.0316	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	64	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	50	17 - 157
13C12-1278-TCDD (CRS)	67	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163904
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0705 SDG#: DX021-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-077-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-077-SA5B-SS-0.0-0.5

LLI Sample # SW 6163904
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 10:04 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0705 SDG#: DX021-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 02:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163905
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D8505 SDG#: DX021-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163905
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D8505 SDG#: DX021-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0844	JBQ	0.0232	1.07	1
11031	12378-PeCDD	40321-76-4	0.208	JB	0.0683	5.36	1
11031	123478-HxCDD	39227-28-6	0.301	JBQ	0.0415	5.36	1
11031	123678-HxCDD	57653-85-7	1.32	JB	0.0437	5.36	1
11031	123789-HxCDD	19408-74-3	0.836	JB	0.0432	5.36	1
11031	1234678-HpCDD	35822-46-9	37.3	B	0.0943	5.36	1
11031	OCDD	3268-87-9	432	B	0.0650	10.7	1
11031	2378-TCDF	51207-31-9	0.197	JB	0.0430	1.07	1
11031	12378-PeCDF	57117-41-6	0.774	JB	0.0205	5.36	1
11031	23478-PeCDF	57117-31-4	0.517	JB	0.0200	5.36	1
11031	123478-HxCDF	70648-26-9	0.720	JB	0.0294	5.36	1
11031	123678-HxCDF	57117-44-9	0.939	JB	0.0270	5.36	1
11031	123789-HxCDF	72918-21-9	0.353	JB	0.0331	5.36	1
11031	234678-HxCDF	60851-34-5	0.544	JB	0.0278	5.36	1
11031	1234678-HpCDF	67562-39-4	7.20	B	0.0323	5.36	1
11031	1234789-HpCDF	55673-89-7	0.641	JB	0.0417	5.36	1
11031	OCDF	39001-02-0	16.1	B	0.0422	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	59	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	68	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163905
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D8505 SDG#: DX021-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-085-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-085-SA5B-SS-0.0-0.5

LLI Sample # SW 6163905
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:35 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D8505 SDG#: DX021-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 03:42	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163906
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D8705 SDG#: DX021-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163906
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D8705 SDG#: DX021-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0365	JB	0.0227	1.09	1
11031	12378-PeCDD	40321-76-4	0.0840	JB	0.0467	5.46	1
11031	123478-HxCDD	39227-28-6	0.163	JBQ	0.0416	5.46	1
11031	123678-HxCDD	57653-85-7	0.983	JB	0.0426	5.46	1
11031	123789-HxCDD	19408-74-3	0.485	JB	0.0414	5.46	1
11031	1234678-HpCDD	35822-46-9	30.1	B	0.0838	5.46	1
11031	OCDD	3268-87-9	322	B	0.0683	10.9	1
11031	2378-TCDF	51207-31-9	0.196	JB	0.0366	1.09	1
11031	12378-PeCDF	57117-41-6	0.489	JB	0.0191	5.46	1
11031	23478-PeCDF	57117-31-4	0.386	JB	0.0183	5.46	1
11031	123478-HxCDF	70648-26-9	0.462	JB	0.0252	5.46	1
11031	123678-HxCDF	57117-44-9	0.319	JB	0.0236	5.46	1
11031	123789-HxCDF	72918-21-9	0.223	JB	0.0289	5.46	1
11031	234678-HxCDF	60851-34-5	0.426	JB	0.0249	5.46	1
11031	1234678-HpCDF	67562-39-4	4.08	JB	0.0553	5.46	1
11031	1234789-HpCDF	55673-89-7	0.527	JBQ	0.0763	5.46	1
11031	OCDF	39001-02-0	10.4	JB	0.0502	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	69	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-087-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163906
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D8705 SDG#: DX021-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-087-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-087-SA5B-SS-0.0-0.5

LLI Sample # SW 6163906
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 13:17 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D8705 SDG#: DX021-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 04:39	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163907
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D9505 SDG#: DX021-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163907
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D9505 SDG#: DX021-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.282	JB	0.0499	1.05	1
11031	12378-PeCDD	40321-76-4	0.369	JBQ	0.0901	5.26	1
11031	123478-HxCDD	39227-28-6	0.492	JBQ	0.0721	5.26	1
11031	123678-HxCDD	57653-85-7	1.84	JB	0.0747	5.26	1
11031	123789-HxCDD	19408-74-3	1.04	JB	0.0712	5.26	1
11031	1234678-HpCDD	35822-46-9	54.9	B	0.151	5.26	1
11031	OCDD	3268-87-9	574	B	0.117	10.5	1
11031	2378-TCDF	51207-31-9	0.146	JBQ	0.0601	1.05	1
11031	12378-PeCDF	57117-41-6	0.515	JB	0.0322	5.26	1
11031	23478-PeCDF	57117-31-4	0.503	JB	0.0312	5.26	1
11031	123478-HxCDF	70648-26-9	0.509	JB	0.0508	5.26	1
11031	123678-HxCDF	57117-44-9	0.603	JB	0.0458	5.26	1
11031	123789-HxCDF	72918-21-9	0.532	JB	0.0553	5.26	1
11031	234678-HxCDF	60851-34-5	0.632	JB	0.0492	5.26	1
11031	1234678-HpCDF	67562-39-4	7.39	B	0.0568	5.26	1
11031	1234789-HpCDF	55673-89-7	0.995	JBQ	0.0846	5.26	1
11031	OCDF	39001-02-0	17.5	B	0.0794	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	68	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163907
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D9505 SDG#: DX021-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-095-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-095-SA5B-SS-0.0-0.5

LLI Sample # SW 6163907
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:40 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D9505 SDG#: DX021-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 05:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163908
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D9105 SDG#: DX021-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163908
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D9105 SDG#: DX021-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0431	JBQ	0.0108	1.09	1
11031	12378-PeCDD	40321-76-4	0.0360	U	0.0360	5.44	1
11031	123478-HxCDD	39227-28-6	0.169	JB	0.0264	5.44	1
11031	123678-HxCDD	57653-85-7	0.766	JB	0.0269	5.44	1
11031	123789-HxCDD	19408-74-3	0.414	JB	0.0237	5.44	1
11031	1234678-HpCDD	35822-46-9	17.7	B	0.0470	5.44	1
11031	OCDD	3268-87-9	179	B	0.0391	10.9	1
11031	2378-TCDF	51207-31-9	0.198	JB	0.0229	1.09	1
11031	12378-PeCDF	57117-41-6	0.344	JBQ	0.0137	5.44	1
11031	23478-PeCDF	57117-31-4	0.333	JB	0.0115	5.44	1
11031	123478-HxCDF	70648-26-9	0.354	JB	0.0205	5.44	1
11031	123678-HxCDF	57117-44-9	0.317	JB	0.0311	5.44	1
11031	123789-HxCDF	72918-21-9	0.212	JB	0.0210	5.44	1
11031	234678-HxCDF	60851-34-5	0.438	JBQ	0.0185	5.44	1
11031	1234678-HpCDF	67562-39-4	3.16	JB	0.0349	5.44	1
11031	1234789-HpCDF	55673-89-7	0.430	JBQ	0.0474	5.44	1
11031	OCDF	39001-02-0	5.66	JB	0.0266	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	58	25 - 181
13C12-123478-HxCDD	56	32 - 141
13C12-123678-HxCDD	55	28 - 130
13C12-123789-HxCDD	60	28 - 130
13C12-1234678-HpCDD	57	23 - 140
13C12-OCDD	52	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	51	24 - 185
13C12-23478-PeCDF	56	21 - 178
13C12-123478-HxCDF	53	26 - 152
13C12-123678-HxCDF	37	26 - 123
13C12-234678-HxCDF	57	28 - 136
13C12-123789-HxCDF	59	29 - 147
13C12-1234678-HpCDF	62	28 - 143
13C12-1234789-HpCDF	54	26 - 138
13C12-OCDF	45	17 - 157
13C12-1278-TCDD (CRS)	56	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163908
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D9105 SDG#: DX021-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-091-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-091-SA5B-SS-0.0-0.5

LLI Sample # SW 6163908
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:10 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D9105 SDG#: DX021-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/16/2011 16:09	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163909
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0345 SDG#: DX021-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	7.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163909
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0345 SDG#: DX021-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0154	U	0.0154	1.08	1
11031	12378-PeCDD	40321-76-4	0.0932	JB	0.0265	5.39	1
11031	123478-HxCDD	39227-28-6	0.0843	JB	0.0298	5.39	1
11031	123678-HxCDD	57653-85-7	0.358	JB	0.0297	5.39	1
11031	123789-HxCDD	19408-74-3	0.270	JB	0.0281	5.39	1
11031	1234678-HpCDD	35822-46-9	9.85	B	0.0506	5.39	1
11031	OCDD	3268-87-9	135	B	0.0464	10.8	1
11031	2378-TCDF	51207-31-9	0.0234	JB	0.0189	1.08	1
11031	12378-PeCDF	57117-41-6	0.0899	JBQ	0.0120	5.39	1
11031	23478-PeCDF	57117-31-4	0.296	JB	0.0145	5.39	1
11031	123478-HxCDF	70648-26-9	0.231	JB	0.0204	5.39	1
11031	123678-HxCDF	57117-44-9	0.187	JB	0.0179	5.39	1
11031	123789-HxCDF	72918-21-9	0.161	JB	0.0219	5.39	1
11031	234678-HxCDF	60851-34-5	0.303	JB	0.0184	5.39	1
11031	1234678-HpCDF	67562-39-4	1.96	JB	0.0161	5.39	1
11031	1234789-HpCDF	55673-89-7	0.212	JB	0.0240	5.39	1
11031	OCDF	39001-02-0	3.36	JB	0.0278	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	64	17 - 157
13C12-1278-TCDD (CRS)	64	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-003-SA5C-SB-4.0-5.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163909
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0345 SDG#: DX021-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-003-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-003-SA5C-SB-4.0-5.0

LLI Sample # SW 6163909
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:37 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0345 SDG#: DX021-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 07:28	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163910
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0145 SDG#: DX021-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163910
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0145 SDG#: DX021-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0188	U	0.0188	1.07	1
11031	12378-PeCDD	40321-76-4	0.0245	U	0.0245	5.36	1
11031	123478-HxCDD	39227-28-6	0.0327	JB	0.0182	5.36	1
11031	123678-HxCDD	57653-85-7	0.117	JBQ	0.0191	5.36	1
11031	123789-HxCDD	19408-74-3	0.139	JB	0.0191	5.36	1
11031	1234678-HpCDD	35822-46-9	0.461	JB	0.0250	5.36	1
11031	OCDD	3268-87-9	1.36	JB	0.0345	10.7	1
11031	2378-TCDF	51207-31-9	0.0167	U	0.0167	1.07	1
11031	12378-PeCDF	57117-41-6	0.0412	JBQ	0.0101	5.36	1
11031	23478-PeCDF	57117-31-4	0.136	JB	0.0103	5.36	1
11031	123478-HxCDF	70648-26-9	0.155	JBQ	0.0175	5.36	1
11031	123678-HxCDF	57117-44-9	0.150	JB	0.0158	5.36	1
11031	123789-HxCDF	72918-21-9	0.110	JB	0.0228	5.36	1
11031	234678-HxCDF	60851-34-5	0.225	JB	0.0170	5.36	1
11031	1234678-HpCDF	67562-39-4	0.790	JB	0.0133	5.36	1
11031	1234789-HpCDF	55673-89-7	0.0998	JB	0.0221	5.36	1
11031	OCDF	39001-02-0	0.515	JB	0.0259	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	63	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163910
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0145 SDG#: DX021-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-001-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-4.0-5.0

LLI Sample # SW 6163910
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:08 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0145 SDG#: DX021-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 08:25	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163911
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0191 SDG#: DX021-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	17.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163911
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0191 SDG#: DX021-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0177 U	0.0177	1.20	1
11031	12378-PeCDD	40321-76-4	0.0381 JBQ	0.0261	6.02	1
11031	123478-HxCDD	39227-28-6	0.0352 JBQ	0.0178	6.02	1
11031	123678-HxCDD	57653-85-7	0.0810 JBQ	0.0184	6.02	1
11031	123789-HxCDD	19408-74-3	0.0829 JBQ	0.0173	6.02	1
11031	1234678-HpCDD	35822-46-9	0.665 JB	0.0272	6.02	1
11031	OCDD	3268-87-9	4.85 JB	0.0306	12.0	1
11031	2378-TCDF	51207-31-9	0.0215 JB	0.0175	1.20	1
11031	12378-PeCDF	57117-41-6	0.0615 JB	0.0111	6.02	1
11031	23478-PeCDF	57117-31-4	0.144 JB	0.0117	6.02	1
11031	123478-HxCDF	70648-26-9	0.169 JB	0.0170	6.02	1
11031	123678-HxCDF	57117-44-9	0.133 JB	0.0139	6.02	1
11031	123789-HxCDF	72918-21-9	0.140 JB	0.0196	6.02	1
11031	234678-HxCDF	60851-34-5	0.282 JB	0.0159	6.02	1
11031	1234678-HpCDF	67562-39-4	0.892 JB	0.0112	6.02	1
11031	1234789-HpCDF	55673-89-7	0.148 JB	0.0200	6.02	1
11031	OCDF	39001-02-0	0.700 JB	0.0295	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163911
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0191 SDG#: DX021-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-001-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-001-SA5C-SB-9.0-10.0

LLI Sample # SW 6163911
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 16:16 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0191 SDG#: DX021-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 09:21	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163912
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D3205 SDG#: DX021-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-032-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163912
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D3205 SDG#: DX021-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.228	JB	0.0289	1.14	1
11031	12378-PeCDD	40321-76-4	1.40	JB	0.0530	5.72	1
11031	123478-HxCDD	39227-28-6	1.86	JB	0.0334	5.72	1
11031	123678-HxCDD	57653-85-7	4.48	JB	0.0348	5.72	1
11031	123789-HxCDD	19408-74-3	3.68	JB	0.0344	5.72	1
11031	1234678-HpCDD	35822-46-9	86.8	B	0.0896	5.72	1
11031	OCDD	3268-87-9	982	B	0.0714	11.4	1
11031	2378-TCDF	51207-31-9	0.556	JBQ	0.0564	1.14	1
11031	12378-PeCDF	57117-41-6	1.11	JB	0.0222	5.72	1
11031	23478-PeCDF	57117-31-4	1.23	JB	0.0214	5.72	1
11031	123478-HxCDF	70648-26-9	1.19	JB	0.0302	5.72	1
11031	123678-HxCDF	57117-44-9	1.12	JB	0.0270	5.72	1
11031	123789-HxCDF	72918-21-9	0.369	JB	0.0360	5.72	1
11031	234678-HxCDF	60851-34-5	1.46	JB	0.0289	5.72	1
11031	1234678-HpCDF	67562-39-4	14.6	B	0.0268	5.72	1
11031	1234789-HpCDF	55673-89-7	1.13	JB	0.0370	5.72	1
11031	OCDF	39001-02-0	43.1	B	0.0261	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	86	21 - 178
13C12-123478-HxCDF	84	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-032-SIV-SD-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163912
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D3205 SDG#: DX021-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-032-SIV-SD-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SED-032-SIV-SD-0.0-0.5

LLI Sample # SW 6163912
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 14:57 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D3205 SDG#: DX021-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 10:18	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163913
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D3305 SDG#: DX021-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163913
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D3305 SDG#: DX021-17*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.103	JBQ	0.0315	1.06	1
11031	12378-PeCDD	40321-76-4	0.874	JBQ	0.0525	5.31	1
11031	123478-HxCDD	39227-28-6	1.21	JB	0.0339	5.31	1
11031	123678-HxCDD	57653-85-7	2.48	JB	0.0356	5.31	1
11031	123789-HxCDD	19408-74-3	2.01	JB	0.0350	5.31	1
11031	1234678-HpCDD	35822-46-9	45.6	B	0.0756	5.31	1
11031	OCDD	3268-87-9	407	B	0.0720	10.6	1
11031	2378-TCDF	51207-31-9	0.227	JB	0.0502	1.06	1
11031	12378-PeCDF	57117-41-6	0.460	JB	0.0242	5.31	1
11031	23478-PeCDF	57117-31-4	0.628	JBQ	0.0228	5.31	1
11031	123478-HxCDF	70648-26-9	0.741	JB	0.0300	5.31	1
11031	123678-HxCDF	57117-44-9	0.799	JB	0.0274	5.31	1
11031	123789-HxCDF	72918-21-9	0.217	JB	0.0343	5.31	1
11031	234678-HxCDF	60851-34-5	1.07	JB	0.0290	5.31	1
11031	1234678-HpCDF	67562-39-4	9.94	B	0.0299	5.31	1
11031	1234789-HpCDF	55673-89-7	0.643	JB	0.0398	5.31	1
11031	OCDF	39001-02-0	20.7	B	0.0351	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	71	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-033-SIV-SD-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163913
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D3305 SDG#: DX021-17*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-033-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-033-SIV-SD-0.0-0.5

LLI Sample # SW 6163913
LLI Group # 1225277
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/13/2010 15:40 by BH

Submitted: 12/14/2010 10:05
Reported: 02/01/2011 23:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D3305 SDG#: DX021-17*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	10364001	01/15/2011 11:14	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	10364001	12/30/2010 14:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10349162402B	12/15/2010 09:36	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225277
Reported: 02/01/11 at 11:39 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10349162402B	Sample number(s): 6163903-6163904,6163906-6163908,6163912-6163913								
28a Moisture Content by 160.3					100		80-120		
Batch number: 10364162402B	Sample number(s): 6163895-6163899,6163901-6163902,6163905,6163909-6163911								
28a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 10362001	Sample number(s): 6163900								
2378-TCDD	2.81	1.76	2.00	pg/l	89		67-158		
12378-PeCDD	0.684 J	0.492	10.0	pg/l	96		70-142		
123478-HxCDD	0.485 J	0.235	10.0	pg/l	106		70-164		
123678-HxCDD	0.512 J	0.243	10.0	pg/l	104		76-134		
123789-HxCDD	0.483 J	0.269	10.0	pg/l	106		64-162		
1234678-HpCDD	1.35 J	0.246	10.0	pg/l	108		70-140		
OCDD	2.39 J	0.274	20.0	pg/l	118		78-144		
2378-TCDF	0.181 J	0.166	2.00	pg/l	95		75-158		
12378-PeCDF	0.474 J	0.125	10.0	pg/l	104		80-134		
23478-PeCDF	0.810 J	0.113	10.0	pg/l	102		68-160		
123478-HxCDF	0.599 J	0.136	10.0	pg/l	111		72-134		
123678-HxCDF	0.568 J	0.132	10.0	pg/l	113		84-130		
123789-HxCDF	0.637 J	0.143	10.0	pg/l	111		78-130		
234678-HxCDF	0.505 J	0.136	10.0	pg/l	109		70-156		
1234678-HpCDF	1.41 J	0.122	10.0	pg/l	116		82-122		
1234789-HpCDF	0.582 J	0.148	10.0	pg/l	117		78-138		
OCDF	1.43 J	0.269	20.0	pg/l	122		63-170		
Batch number: 10364001	Sample number(s): 6163895-6163899,6163901-6163913								
2378-TCDD	0.0150 J	0.00760	1.00	ng/kg	103		67-158		
12378-PeCDD	0.0278 J	0.00980	5.00	ng/kg	104		70-142		
123478-HxCDD	0.0185 J	0.00990	5.00	ng/kg	106		70-164		
123678-HxCDD	0.0227 J	0.0104	5.00	ng/kg	105		76-134		
123789-HxCDD	0.0268 J	0.0101	5.00	ng/kg	105		64-162		
1234678-HpCDD	0.136 J	0.0148	5.00	ng/kg	103		70-140		
OCDD	0.342 J	0.0157	10.0	ng/kg	103		78-144		
2378-TCDF	0.0289 J	0.00680	1.00	ng/kg	114		75-158		
12378-PeCDF	0.0340 J	0.00400	5.00	ng/kg	105		80-134		
23478-PeCDF	0.0647 J	0.00410	5.00	ng/kg	104		68-160		
123478-HxCDF	0.0503 J	0.00770	5.00	ng/kg	100		72-134		
123678-HxCDF	0.0334 J	0.00620	5.00	ng/kg	99		84-130		
123789-HxCDF	0.0604 J	0.00930	5.00	ng/kg	101		78-130		
234678-HxCDF	0.0453 J	0.00720	5.00	ng/kg	101		70-156		
1234678-HpCDF	0.123 J	0.00650	5.00	ng/kg	100		82-122		
1234789-HpCDF	0.0507 J	0.0115	5.00	ng/kg	101		78-138		
OCDF	0.248 J	0.0169	10.0	ng/kg	103		63-170		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225277
Reported: 02/01/11 at 11:39 PM

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10349162402B	Sample number(s): 6163903-6163904,6163906-6163908,6163912-6163913 BKG: P163881								
28a Moisture Content by 160.3						8.5	8.8	4	20
Batch number: 10364162402B	Sample number(s): 6163895-6163899,6163901-6163902,6163905,6163909-6163911 BKG: P163871								
28a Moisture Content by 160.3						11.4	11.7	3	20
Batch number: 10364001	Sample number(s): 6163895-6163899,6163901-6163913 UNSPK: 6163897								
2378-TCDD	100	101	67-158	1	25				
12378-PeCDD	102	105	70-142	2	25				
123478-HxCDD	104	107	70-164	3	25				
123678-HxCDD	105	104	76-134	0	25				
123789-HxCDD	106	104	64-162	2	25				
1234678-HpCDD	101	108	70-140	7	25				
OCDD	99	128	78-144	23	25				
2378-TCDF	111	106	75-158	4	25				
12378-PeCDF	106	106	80-134	0	25				
23478-PeCDF	104	105	68-160	1	25				
123478-HxCDF	99	101	72-134	1	25				
123678-HxCDF	101	101	84-130	0	25				
123789-HxCDF	100	100	78-130	0	25				
234678-HxCDF	100	100	70-156	0	25				
1234678-HpCDF	101	101	82-122	0	25				
1234789-HpCDF	102	101	78-138	0	25				
OCDF	104	102	63-170	2	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B
Batch number: 10362001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6163900	3*	34	27	27	29	29
Blank	6*	70	67	66	66	69
OPR	10*	63	56	55	57	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225277
Reported: 02/01/11 at 11:39 PM

Surrogate Quality Control

6163900	29	29	28	9*	15*	24*
Blank	64	61	54	11*	32	58
OPR	55	54	48	17*	37	52
Limits:	28-143	26-138	17-157	35-197	25-181	32-141

	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6163900	23*	21*	30	29	33	29
Blank	54	49	63	55	57	68
OPR	50	46	56	48	51	60
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 10364001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6163895	65	76	72	83	73	66
6163896	59	69	69	84	71	58
6163897	59	67	66	67	67	62
6163898	52	25	21*	25*	32	37
6163899	64	77	76	81	77	75
6163901	60	72	70	79	71	63
6163902	65	75	73	77	74	72
6163903	63	73	71	79	71	68
6163904	60	66	64	76	66	58
6163905	64	72	70	72	72	72
6163906	71	83	81	83	81	80
6163907	72	84	80	84	80	80
6163908	58	56	53	37	57	59
6163909	68	66	67	74	71	71
6163910	65	80	79	86	79	71
6163911	64	72	70	80	72	65
6163912	75	86	84	89	84	81
6163913	68	83	81	83	80	81
Blank	64	73	73	85	76	67
MS	52	25	21*	25*	32	37
MSD	64	77	76	81	77	75
OPR	61	72	68	80	70	64
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6163895	95	62	50	73	78	76
6163896	104	59	53	66	74	76
6163897	86	60	53	69	68	67
6163898	30	31	27	18*	29	24*
6163899	88	74	67	71	74	72
6163901	92	63	56	73	72	73
6163902	82	71	64	71	71	73
6163903	86	66	58	77	71	72
6163904	88	57	50	67	69	69
6163905	73	69	59	68	68	68
6163906	88	77	69	76	78	79

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225277
Reported: 02/01/11 at 11:39 PM

Surrogate Quality Control

6163907	92	78	68	79	80	80
6163908	62	54	45	56	58	56
6163909	88	71	64	64	70	67
6163910	98	72	63	76	79	80
6163911	93	64	56	71	74	75
6163912	91	81	73	81	81	82
6163913	84	78	71	77	77	78
Blank	99	65	57	75	77	81
MS	30	31	27	18*	29	24*
MSD	88	74	67	71	74	72
OPR	93	62	53	71	75	76
Limits:	28-143	26-138	17-157	35-197	25-181	32-141

	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6163895	73	75	75	67	68	84
6163896	77	76	78	71	59	82
6163897	66	68	68	62	63	68
6163898	25*	37	34	34	30	34
6163899	73	74	75	70	69	81
6163901	71	71	73	66	64	80
6163902	71	71	72	66	70	78
6163903	70	71	70	66	67	80
6163904	70	70	70	65	61	77
6163905	67	68	66	59	70	75
6163906	76	77	77	70	77	84
6163907	79	79	80	74	78	86
6163908	55	60	57	52	59	51
6163909	69	75	74	70	72	84
6163910	80	79	82	72	70	86
6163911	73	74	76	68	65	81
6163912	82	81	81	75	80	87
6163913	78	76	77	69	77	83
Blank	79	78	77	69	64	80
MS	25*	37	34	34	30	34
MSD	73	74	75	70	69	81
OPR	75	75	74	65	59	78
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1225277 6163895-913

CHAIN OF CUSTODY RECORD

CDM | SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270SIM	TPH-GRO EPA 8015B	TPH-DRO EPA 8015B Mod.	*Metals EPA 6010/6020/7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	PerchlorateConfirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-006-SA5C-SB-9.0-10.0	12.13.10	0955	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	3 x 4 oz. Jars & 3 x 16 oz. Jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	dup
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	8 x 16 oz. Jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	MS sample
SL-006-SA5C-SB-4.0-5.0MS	12.13.10	0945	soil	none	4 x 16 oz. Jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	MS sample
EB-15-SA5B-121310	12.13.10	1215	water	none	6-1 liter amber			X						X	X			X	X										rinsate
EB-15-SA5B-121310	12.13.10	1215	water	none	1-500 ml poly							X	X			X													rinsate
EB-15-SA5B-121310	12.13.10	1215	water	none	HNO3						X																		rinsate
EB-15-SA5B-121310	12.13.10	1215	water	none	HCl	X	X																						rinsate
SL-006-SA5C-SB-4.5MS	12.13.10	0943	soil	none	15 Encore Samplers	X	X		X																				MS sample
SL-006-SA5C-SB-9.5	12.13.10	0953	soil	none	5 Encore Samplers	X	X		X																				
DUP13-SA5C-QC-121310	12.13.10	1010	soil	none	5 Encore Samplers	X	X		X																				dup
SL-007-SA5C-SB-9.5	12.13.10	1210	soil	none	5 Encore Samplers	X	X		X																				
SL-007-SA5C-SB-4.0-5.0	12.13.10	1214	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-007-SA5C-SB-9.0-10.0	12.13.10	1214	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-075-SA5B-SS-0.0-0.5	12.13.10	0903	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
~~SL-007-SA5B-SS-0.0-0.5~~	12.13.10	1004	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										SL-077-SA5B-SS-0.0-0.5 Per AMC on 12/17/10 NM 12/30/10
SL-007-SA5B-SS-4.5	12.13.10	1200	soil	none	5 Encore Samplers	X	X		X																				
SL-078-SA5B-SS-0.0-0.5	12.13.10	1110	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-084-SA5B-SS-0.0-0.5	12.13.10	1046	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-076-SA5B-SS-0.0-0.5	12.13.10	0928	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-071-SA5B-SS-0.0-0.5MS	12.13.10	1009	soil	none	2 x 16 oz. JarS & 2 6" sleeves			X			X	X	X	X	X	X	X	X	X										MS sample
SL-139-SA5B-SS-0.0-0.5	12.13.10	1104	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-~~073~~-SA5B-SS-0.0-0.5	12.13.10	1049	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-074-SA5B-SS-0.0-0.5	12.13.10	0915	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-301-SA5B-SS-0.0-0.5	12.13.10	0900	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-07~~6~~-SA5B-SS-0.0-0.5	12.13.10	0930	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-072-SA5B-SS-0.0-0.5	12.13.10	0948	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
DUP04-SA5B-QC-121310	12.13.10	1015	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										dup
SED-029-SIV-SD-0.0-0.5	12.13.10	1152	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-031-SIV-SD-0.0-0.5	12.13.10	0920	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-030-SIV-SD-0.0-0.5	12.13.10	1113	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-040-SIV-SD-0.0-0.5	12.13.10	1019	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-086-SA5B-SS-0.0-0.5	12.13.10	1345	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-092-SA5B-SS-0.0-0.5	12.13.10	1327	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-103-SA5B-SS-0.0-0.5	12.13.10	1425	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-089-SA5B-SS-0.0-0.5	12.13.10	1410	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-236-SA5B-SS-0.0-0.5	12.13.10	1310	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	5 Encore Samplers	X	X		X																				
SL-085-SA5B-SS-0.0-0.5	12.13.10	1335	soil	none	1 x 16 oz. Jar															X	X	X	X	X	X	X			
SL-087-SA5B-SS-0.0-0.5	12.13.10	1317	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-095-SA5B-SS-0.0-0.5	12.13.10	1440	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-091-SA5B-SS-0.0-0.5	12.13.10	1510	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-003-SA5C-SB-4.0-5.0	12.13.10	1437	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-003-SA5C-SB-4.5	12.13.10	1433	soil	none	5 Encore Samplers	X	X		X																				
SL-001-SA5C-SB-4.0-5.0	12.13.10	1608	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-001-SA5C-SB-9.0-10.0	12.13.10	1616	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X			X	X	X	X	X	X				X	X	X	X	X	X			X	
SL-001-SA5C-SB-4.5	12.13.10	1604	soil	none	5 Encore Samplers	X	X		X																				
SL-001-SA5C-SB-9.5	12.13.10	1612	soil	none	5 Encore Samplers	X	X		X																				
SED-032-SIV-SD-0.0-0.5	12.13.10	1457	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-033-SIV-SD-0.0-0.5	12.13.10	1540	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Laboratory:
	12/13/10 ~~Date/Time~~ 1630		12/14/10 1005	Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time	Airbill No. ~~00000000~~ 8007 32992		6 coolers

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

January 26, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/15/2010
Group Number: 1225470
SDG: DE038
PO Number: 1203-004-007-AL
Release Number: Tracking #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
DUP05-SA5B-QC-121410 Grab Soil	6164621
SL-120-SA5B-SS-0.0-0.5 Grab Soil	6164622
SL-120-SA5B-SS-0.0-0.5MS Grab Soil	6164623
SL-120-SA5B-SS-0.0-0.5MSD Grab Soil	6164624
SL-120-SA5B-SS-0.0-0.5DUP Grab Soil	6164625
SL-108-SA5B-SS-0.0-0.5 Grab Soil	6164626
SL-119-SA5B-SS-0.0-0.5 Grab Soil	6164627
SL-240-SA5B-SS-0.0-0.5 Grab Soil	6164628
SL-109-SA5B-SS-0.0-0.5 Grab Soil	6164629
SL-122-SA5B-SS-0.0-0.5 Grab Soil	6164630
SL-121-SA5B-SS-0.0-0.5 Grab Soil	6164631
SL-054-SA5B-SS-0.0-0.5 Grab Soil	6164632
SL-105-SA5B-SS-0.0-0.5 Grab Soil	6164633
SL-098-SA5B-SS-0.0-0.5 Grab Soil	6164634
SL-142-SA5B-SS-0.0-0.5 Grab Soil	6164635
SL-143-SA5B-SS-0.0-0.5 Grab Soil	6164636
SL-123-SA5B-SS-0.0-0.5 Grab Soil	6164637
SL-124-SA5B-SS-0.0-0.5 Grab Soil	6164638
SL-309-SA5B-SS-0.0-0.5 Grab Soil	6164639
SL-311-SA5B-SS-0.0-0.5 Grab Soil	6164640
SL-310-SA5B-SS-0.0-0.5 Grab Soil	6164641
SL-312-SA5B-SS-0.0-0.5 Grab Soil	6164642
SED-025-SIV-SD-0.0-0.5 Grab Soil	6164643

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	CDM Federal Services Program	Attn: Todd Burgesser
1 COPY TO	Data Package Group	

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

Robert Heisey

Robert Heisey
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164621
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE038-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	170	U	170	520	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U	170	520	1
04688	Benzyl alcohol	100-51-6	170	U	170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U	17	170	1
04688	Carbazole	86-74-8	17	U	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	170	1
04688	4-Chloroaniline	106-47-8	69	U	69	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U	17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U	17	170	1
04688	2-Chlorophenol	95-57-8	17	U	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	170	1
04688	Dibenzofuran	132-64-9	17	U	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U	100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U	17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U	170	520	1
04688	2,4-Dinitrophenol	51-28-5	690	U	690	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U	17	350	1
04688	Hexachlorobenzene	118-74-1	17	U	17	170	1
04688	Hexachlorobutadiene	87-68-3	69	U	69	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U	170	520	1
04688	Hexachloroethane	67-72-1	17	U	17	170	1
04688	Isophorone	78-59-1	17	U	17	170	1
04688	2-Methylphenol	95-48-7	35	U	35	170	1
04688	4-Methylphenol	106-44-5	35	U	35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U	17	170	1
04688	3-Nitroaniline	99-09-2	35	U	35	170	1
04688	4-Nitroaniline	100-01-6	69	U	69	170	1
04688	Nitrobenzene	98-95-3	17	U	17	170	1
04688	2-Nitrophenol	88-75-5	17	U	17	170	1
04688	4-Nitrophenol	100-02-7	170	U	170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U	170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164621
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE038-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	17	U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	170	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.69	U	0.69	1.7	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.7	1
10138	Anthracene	120-12-7	0.69	J	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	10		0.69	1.7	1
10138	Benzo(a)pyrene	50-32-8	16		0.69	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	22		0.69	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	16		0.69	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	7.7		0.69	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.2	U	6.2	19	1
10138	Di-n-butylphthalate	84-74-2	7.3	J	6.2	19	1
10138	Chrysene	218-01-9	59		0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	3.2		0.69	1.7	1
10138	Diethylphthalate	84-66-2	6.2	U	6.2	19	1
10138	Dimethylphthalate	131-11-3	6.2	U	6.2	19	1
10138	Fluoranthene	206-44-0	11		0.69	1.7	1
10138	Fluorene	86-73-7	0.69	U	0.69	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	5.1		0.69	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.69	U	0.69	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.69	U	0.69	1.7	1
10138	Naphthalene	91-20-3	0.99	J	0.69	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.69	U	0.69	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.5	J	6.2	19	1
10138	Phenanthrene	85-01-8	3.7		0.69	1.7	1
10138	Pyrene	129-00-0	15		0.69	1.7	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.2	U	1.2	3.7	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.3	1
10401	2,4-DB	94-82-6	6.2		0.64	1.8	1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.2	1
10401	Dinoseb	88-85-7	0.83	U	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83	U	0.83	1.8	1
10401	MCPA	94-74-6	820		79	260	1
10401	MCPP (Mecoprop)	93-65-2	140	U	140	260	1
10401	2,4,5-T	93-76-5	0.085	U	0.085	0.18	1
10401	2,4,5-TP	93-72-1	0.078	U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164621
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE038-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.068	U	0.068	0.17	1
01363	Alpha BHC	319-84-6	0.035	U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.062	U	0.062	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035	U	0.035	0.17	1
01363	Chlordane	57-74-9	1.8	U	1.8	3.5	1
01363	p,p-DDD	72-54-8	0.88	U	0.88	0.88	1
01363	p,p-DDE	72-55-9	0.22	U	0.22	0.35	1
01363	p,p-DDT	50-29-3	0.85	U	0.85	0.85	1
01363	Delta BHC	319-86-8	0.037	U	0.037	0.17	1
01363	Dieldrin	60-57-1	0.11	U	0.11	0.35	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.068	U	0.068	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.068	U	0.068	0.35	1
01363	Endrin	72-20-8	0.068	U	0.068	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.19	U	0.19	0.35	1
01363	Endrin Ketone	53494-70-5	0.25	U	0.25	0.35	1
01363	Heptachlor	76-44-8	0.062	U	0.062	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.076	U	0.076	0.17	1
01363	Methoxychlor	72-43-5	0.35	U	0.35	1.7	1
01363	Mirex	2385-85-5	0.16	U	0.16	0.35	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.8	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.0	U	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34	U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52	U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54	U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52	U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34	U	0.34	1.8	1
10225	PCB-1254	11097-69-1	1.5	J	0.34	1.8	1
10225	PCB-1260	11096-82-5	1.1	J	0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34	U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34	U	0.34	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
The surrogate data is outside the QC limits due to unresolvable matrix

*=This limit was used in the evaluation of the final result

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164621
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE038-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
problems evident in the sample chromatogram.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	6,070		5.06	20.1	1
07914	Boron	7440-42-8	5.07		0.894	5.03	1
01650	Calcium	7440-70-2	1,870		6.16	20.1	1
01654	Iron	7439-89-6	8,140		4.73	20.1	1
01656	Lithium	7439-93-2	4.4		0.22	2.0	1
01657	Magnesium	7439-95-4	1,170		2.55	10.1	1
06958	Manganese	7439-96-5	94.0		0.0784	0.503	1
10145	Phosphorus	7723-14-0	232		0.563	10.1	1
01662	Potassium	7440-09-7	955		18.1	50.3	1
01667	Sodium	7440-23-5	37.5	U	37.5	101	1
07968	Strontium	7440-24-6	24.4		0.0623	0.503	1
06969	Tin	7440-31-5	1.69	J	1.01	10.1	1
06970	Titanium	7440-32-6	248		0.382	1.01	1
10146	Zirconium	7440-67-7	1.19	J	0.844	5.03	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.169	J	0.0621	0.207	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.38		0.0621	0.414	2
06126	Barium	7440-39-3	56.9		0.112	0.414	2
06127	Beryllium	7440-41-7	0.270		0.0166	0.104	2
06128	Cadmium	7440-43-9	0.180		0.0373	0.104	2
06131	Chromium	7440-47-3	9.66		0.124	0.414	2
06132	Cobalt	7440-48-4	4.40		0.0207	0.104	2
06133	Copper	7440-50-8	6.39		0.0683	0.414	2
06135	Lead	7439-92-1	6.89		0.0108	0.207	2
06138	Molybdenum	7439-98-7	0.384		0.0518	0.104	2
06139	Nickel	7440-02-0	5.58		0.104	0.414	2
06141	Selenium	7782-49-2	0.157	J	0.0414	0.414	2
06142	Silver	7440-22-4	0.0124	U	0.0124	0.104	2
06145	Thallium	7440-28-0	0.0943	J	0.0311	0.104	2
06148	Vanadium	7440-62-2	20.2		0.0228	0.104	2
06149	Zinc	7440-66-6	36.5		0.580	3.11	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0029	U	0.0029	0.101	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.0	J	0.83	1.0	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.3	U	9.3	31.1	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	2.8		0.21	1.0	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164621
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE038-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	415	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.88	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	3.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 02:51	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 10:16	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 16:45	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 21:27	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 04:37	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/29/2010 08:45	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 08:45	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/29/2010 08:45	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164621
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE038-01FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/29/2010 08:45	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	103515708008	12/29/2010 08:45	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:33	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 08:45	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:18	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:18	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:18	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:18	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:28	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 03:54	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 14:42	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 14:41	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164622
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	170	U	170	520	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U	170	520	1
04688	Benzyl alcohol	100-51-6	170	U	170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U	17	170	1
04688	Carbazole	86-74-8	17	U	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	170	1
04688	4-Chloroaniline	106-47-8	70	U	70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U	17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U	17	170	1
04688	2-Chlorophenol	95-57-8	17	U	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	170	1
04688	Dibenzofuran	132-64-9	17	U	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U	100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U	17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U	170	520	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U	17	350	1
04688	Hexachlorobenzene	118-74-1	17	U	17	170	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U	170	520	1
04688	Hexachloroethane	67-72-1	17	U	17	170	1
04688	Isophorone	78-59-1	17	U	17	170	1
04688	2-Methylphenol	95-48-7	35	U	35	170	1
04688	4-Methylphenol	106-44-5	35	U	35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U	17	170	1
04688	3-Nitroaniline	99-09-2	35	U	35	170	1
04688	4-Nitroaniline	100-01-6	70	U	70	170	1
04688	Nitrobenzene	98-95-3	17	U	17	170	1
04688	2-Nitrophenol	88-75-5	17	U	17	170	1
04688	4-Nitrophenol	100-02-7	170	U	170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U	170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164622
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	17	U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	170	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.7	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.7	1
10138	Anthracene	120-12-7	0.41	J	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	4.3		0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	6.2		0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	7.4		0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	6.1		0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	3.8		0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.5	J	6.3	19	1
10138	Chrysene	218-01-9	18		0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	1.2	J	0.70	1.7	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluoranthene	206-44-0	5.8		0.70	1.7	1
10138	Fluorene	86-73-7	0.70	U	0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	2.9		0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.70	U	0.70	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.70	U	0.70	1.7	1
10138	Naphthalene	91-20-3	0.70	U	0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	9.0	J	6.3	19	1
10138	Phenanthrene	85-01-8	2.3		0.70	1.7	1
10138	Pyrene	129-00-0	7.0		0.70	1.7	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.4	1
10401	2,4-DB	94-82-6	3.9		0.65	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.83	U	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83	U	0.83	1.8	1
10401	MCPA	94-74-6	720		79	260	1
10401	MCPP (Mecoprop)	93-65-2	200	J	78	260	1
10401	2,4,5-T	93-76-5	0.086	U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.078	U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.035	U	0.035	0.17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164622
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Beta BHC	319-85-7	0.063	U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035	U	0.035	0.17	1
01363	Chlordane	57-74-9	0.83	U	0.83	3.5	1
01363	p,p-DDD	72-54-8	0.19	U	0.19	0.35	1
01363	p,p-DDE	72-55-9	0.069	U	0.069	0.35	1
01363	p,p-DDT	50-29-3	0.093	U	0.093	0.35	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.069	U	0.069	0.35	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069	U	0.069	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.069	U	0.069	0.35	1
01363	Endrin	72-20-8	0.069	U	0.069	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.069	U	0.069	0.35	1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.35	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.035	U	0.035	0.17	1
01363	Methoxychlor	72-43-5	0.35	U	0.35	1.7	1
01363	Mirex	2385-85-5	0.25	U	0.25	0.35	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.9	J	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34	U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52	U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54	U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52	U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34	U	0.34	1.8	1
10225	PCB-1254	11097-69-1	0.94	J	0.34	1.8	1
10225	PCB-1260	11096-82-5	0.91	J	0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34	U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34	U	0.34	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164622
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	7,750		5.19	20.6	1
07914	Boron	7440-42-8	5.91		0.919	5.16	1
01650	Calcium	7440-70-2	2,070		6.33	20.6	1
01654	Iron	7439-89-6	10,500		4.86	20.6	1
01656	Lithium	7439-93-2	7.6		0.23	2.1	1
01657	Magnesium	7439-95-4	1,850		2.62	10.3	1
06958	Manganese	7439-96-5	131		0.0805	0.516	1
10145	Phosphorus	7723-14-0	271		0.578	10.3	1
01662	Potassium	7440-09-7	1,440		18.6	51.6	1
01667	Sodium	7440-23-5	49.7	J	38.5	103	1
07968	Strontium	7440-24-6	25.0		0.0640	0.516	1
06969	Tin	7440-31-5	2.16	J	1.03	10.3	1
06970	Titanium	7440-32-6	404		0.392	1.03	1
10146	Zirconium	7440-67-7	2.17	J	0.867	5.16	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.155	J	0.0619	0.206	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	3.17		0.0619	0.413	2
06126	Barium	7440-39-3	48.1		0.112	0.413	2
06127	Beryllium	7440-41-7	0.294		0.0165	0.103	2
06128	Cadmium	7440-43-9	0.121		0.0372	0.103	2
06131	Chromium	7440-47-3	8.45		0.124	0.413	2
06132	Cobalt	7440-48-4	3.77		0.0206	0.103	2
06133	Copper	7440-50-8	5.68		0.0681	0.413	2
06135	Lead	7439-92-1	5.86		0.0107	0.206	2
06138	Molybdenum	7439-98-7	0.310		0.0516	0.103	2
06139	Nickel	7440-02-0	5.49		0.103	0.413	2
06141	Selenium	7782-49-2	0.146	J	0.0413	0.413	2
06142	Silver	7440-22-4	0.0154	J	0.0124	0.103	2
06145	Thallium	7440-28-0	0.101	J	0.0310	0.103	2
06148	Vanadium	7440-62-2	17.5		0.0227	0.103	2
06149	Zinc	7440-66-6	26.3		0.578	3.10	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0103	J	0.0030	0.103	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.83	U	0.83	1.0	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4	U	9.4	31.3	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.0	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164622
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02BKG

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	414	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	8.38	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	4.1	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 01:07	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 08:41	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 17:13	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 21:40	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 20:44	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 04:56	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/29/2010 08:23	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 08:23	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164622
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/29/2010 08:23	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/29/2010 08:23	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	103515708008	12/29/2010 08:23	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:11	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 08:23	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:00	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:00	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:00	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:00	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:29	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 03:12	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 13:30	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 14:57	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,700		17	170	1
04688	Acenaphthylene	208-96-8	1,800		17	170	1
04688	Aniline	62-53-3	1,000		170	520	1
04688	Anthracene	120-12-7	1,700		17	170	1
04688	Benzidine	92-87-5	2,400	J	1,200	3,500	1
04688	Benzo(a)anthracene	56-55-3	1,800		17	170	1
04688	Benzo(a)pyrene	50-32-8	1,600		17	170	1
04688	Benzo(b)fluoranthene	205-99-2	1,600		17	170	1
04688	Benzo(g,h,i)perylene	191-24-2	1,600		17	170	1
04688	Benzo(k)fluoranthene	207-08-9	1,600		17	170	1
04688	Benzoic acid	65-85-0	800		170	520	1
04688	Benzyl alcohol	100-51-6	1,700		170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	1,700		17	170	1
04688	Butylbenzylphthalate	85-68-7	1,900		17	170	1
04688	Di-n-butylphthalate	84-74-2	1,800		17	170	1
04688	Carbazole	86-74-8	1,700		17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	1,700		35	170	1
04688	4-Chloroaniline	106-47-8	1,400		70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,800		17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700		17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,700		17	170	1
04688	2-Chloronaphthalene	91-58-7	1,400		17	170	1
04688	2-Chlorophenol	95-57-8	1,800		17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,700		35	170	1
04688	Chrysene	218-01-9	1,800		17	170	1
04688	Dibenz(a,h)anthracene	53-70-3	1,600		17	170	1
04688	Dibenzofuran	132-64-9	1,700		17	170	1
04688	1,2-Dichlorobenzene	95-50-1	1,600		17	170	1
04688	1,3-Dichlorobenzene	541-73-1	1,600		17	170	1
04688	1,4-Dichlorobenzene	106-46-7	1,600		17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,200		100	350	1
04688	2,4-Dichlorophenol	120-83-2	1,800		17	170	1
04688	Diethylphthalate	84-66-2	1,700		17	170	1
04688	2,4-Dimethylphenol	105-67-9	1,800		35	170	1
04688	3,5-Dimethylphenol	108-68-9	1,900		35	170	1
04688	Dimethylphthalate	131-11-3	1,800		17	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	990		170	520	1
04688	2,4-Dinitrophenol	51-28-5	1,000	J	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	1,800		35	170	1
04688	2,6-Dinitrotoluene	606-20-2	1,800		17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	1,900		17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,900		17	350	1
04688	Fluoranthene	206-44-0	1,700		17	170	1
04688	Fluorene	86-73-7	1,700		17	170	1
04688	Hexachlorobenzene	118-74-1	1,800		17	170	1
04688	Hexachlorobutadiene	87-68-3	1,700		70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	2,800		170	520	1
04688	Hexachloroethane	67-72-1	1,600		17	170	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600		17	170	1
04688	Isophorone	78-59-1	1,700		17	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,700	17	170	1
04688	2-Methylnaphthalene	91-57-6	1,600	17	170	1
04688	2-Methylphenol	95-48-7	1,800	35	170	1
04688	4-Methylphenol	106-44-5	1,800	35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,600	17	170	1
04688	2-Nitroaniline	88-74-4	1,800	17	170	1
04688	3-Nitroaniline	99-09-2	1,700	35	170	1
04688	4-Nitroaniline	100-01-6	1,300	70	170	1
04688	Nitrobenzene	98-95-3	1,800	17	170	1
04688	2-Nitrophenol	88-75-5	1,700	17	170	1
04688	4-Nitrophenol	100-02-7	1,700	170	520	1
04688	N-Nitrosodimethylamine	62-75-9	1,600	35	170	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,600	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,700	17	170	1
04688	Pentachlorophenol	87-86-5	1,300	170	520	1
04688	Phenanthrene	85-01-8	1,700	17	170	1
04688	Phenol	108-95-2	1,900	17	170	1
04688	Pyrene	129-00-0	1,900	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,700	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	1,800	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	1,800	35	170	1
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	26	0.70	1.7	1
10138	Acenaphthylene	208-96-8	27	0.35	1.7	1
10138	Anthracene	120-12-7	27	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	28	0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	26	0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	26	0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	20	0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	25	0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	34	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	36	6.3	19	1
10138	Chrysene	218-01-9	28	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	20	0.70	1.7	1
10138	Diethylphthalate	84-66-2	30	6.3	19	1
10138	Dimethylphthalate	131-11-3	30	6.3	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	35	6.3	19	1
10138	Fluoranthene	206-44-0	28	0.70	1.7	1
10138	Fluorene	86-73-7	27	0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	19	0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	29	0.70	1.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	25		0.70	1.7	1
10138	Naphthalene	91-20-3	26		0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	25		0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	33		6.3	19	1
10138	Phenanthrene	85-01-8	26		0.70	1.7	1
10138	Pyrene	129-00-0	27		0.70	1.7	1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.6 ug/kg. The blank value was not subtracted from the analytical result.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	11		1.3	3.8	1
10401	Dalapon	75-99-0	16		4.6	9.4	1
10401	2,4-DB	94-82-6	9.0		0.65	1.8	1
10401	Dicamba	1918-00-9	0.90	J	0.42	1.3	1
10401	Dinoseb	88-85-7	1.3	J	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	8.9		0.83	1.8	1
10401	MCPA	94-74-6	950		79	260	1
10401	MCPP (Mecoprop)	93-65-2	750		78	260	1
10401	2,4,5-T	93-76-5	0.78		0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.66		0.078	0.18	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.30		0.069	0.18	1
01363	Alpha BHC	319-84-6	0.35		0.035	0.18	1
01363	Beta BHC	319-85-7	0.34		0.063	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.38		0.035	0.18	1
01363	Chlordane	57-74-9	0.83	U	0.83	3.5	1
01363	p,p-DDD	72-54-8	1.0		0.069	0.35	1
01363	p,p-DDE	72-55-9	0.82		0.069	0.35	1
01363	p,p-DDT	50-29-3	0.80		0.069	0.35	1
01363	Delta BHC	319-86-8	0.40		0.038	0.18	1
01363	Dieldrin	60-57-1	0.83		0.069	0.35	1
01363	Endosulfan I	959-98-8	0.33		0.046	0.18	1
01363	Endosulfan II	33213-65-9	0.60		0.069	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.73		0.069	0.35	1
01363	Endrin	72-20-8	0.76		0.069	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.46		0.069	0.35	1
01363	Endrin Ketone	53494-70-5	0.59		0.069	0.35	1
01363	Heptachlor	76-44-8	0.46		0.063	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.30		0.035	0.18	1
01363	Methoxychlor	72-43-5	4.8		0.35	1.7	1
01363	Mirex	2385-85-5	0.069	U	0.069	0.35	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.9	J	1.0	3.4	1
10225	PCB-1016	12674-11-2	37		0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52	U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54	U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52	U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34	U	0.34	1.8	1
10225	PCB-1254	11097-69-1	6.9		0.34	1.8	1
10225	PCB-1260	11096-82-5	33		0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34	U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34	U	0.34	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,700		5.09	20.2	1
07914	Boron	7440-42-8	198		0.901	5.06	1
01650	Calcium	7440-70-2	2,070		6.21	20.2	1
01654	Iron	7439-89-6	9,450		4.77	20.2	1
01656	Lithium	7439-93-2	107		0.22	2.0	1
01657	Magnesium	7439-95-4	1,870		2.57	10.1	1
06958	Manganese	7439-96-5	162		0.0790	0.506	1
10145	Phosphorus	7723-14-0	369		0.567	10.1	1
01662	Potassium	7440-09-7	2,400		18.2	50.6	1
01667	Sodium	7440-23-5	1,090		37.8	101	1
07968	Strontium	7440-24-6	125		0.0628	0.506	1
06969	Tin	7440-31-5	389		1.01	10.1	1
06970	Titanium	7440-32-6	498		0.385	1.01	1
10146	Zirconium	7440-67-7	102		0.850	5.06	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	1.01		0.0626	0.209	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.65		0.0626	0.417	2
06126	Barium	7440-39-3	63.9		0.113	0.417	2
06127	Beryllium	7440-41-7	1.11		0.0167	0.104	2
06128	Cadmium	7440-43-9	1.24		0.0375	0.104	2
06131	Chromium	7440-47-3	20.8		0.125	0.417	2
06132	Cobalt	7440-48-4	50.3		0.0209	0.104	2
06133	Copper	7440-50-8	17.2		0.0688	0.417	2
06135	Lead	7439-92-1	9.28		0.0108	0.209	2
06138	Molybdenum	7439-98-7	11.2		0.0521	0.104	2
06139	Nickel	7440-02-0	16.4		0.104	0.417	2
06141	Selenium	7782-49-2	2.07		0.0417	0.417	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06142	Silver	7440-22-4	11.1	0.0125	0.104	2
06145	Thallium	7440-28-0	0.513	0.0313	0.104	2
06148	Vanadium	7440-62-2	31.5	0.0229	0.104	2
06149	Zinc	7440-66-6	37.9	0.584	3.13	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.169	0.0028	0.0993	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.5	0.83	1.0	1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	457	9.4	31.3	1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	41.8	1.0	5.2	5
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3	n.a.	4.1	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 01:42	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 09:13	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 17:40	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 21:55	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 21:03	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 05:15	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/29/2010 08:34	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 08:34	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/29/2010 08:34	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/29/2010 08:34	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	103515708008	12/29/2010 08:34	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:22	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 08:34	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:09	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:09	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:09	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:09	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:32	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 03:40	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 14:18	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 15:13	Carrie E Miller	5
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164623
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164624
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Acenaphthene	83-32-9	1,700		17	170	1
04688	Acenaphthylene	208-96-8	1,800		17	170	1
04688	Aniline	62-53-3	900		170	520	1
04688	Anthracene	120-12-7	1,700		17	170	1
04688	Benzidine	92-87-5	3,000	J	1,200	3,500	1
04688	Benzo(a)anthracene	56-55-3	1,700		17	170	1
04688	Benzo(a)pyrene	50-32-8	1,500		17	170	1
04688	Benzo(b)fluoranthene	205-99-2	1,500		17	170	1
04688	Benzo(g,h,i)perylene	191-24-2	1,500		17	170	1
04688	Benzo(k)fluoranthene	207-08-9	1,500		17	170	1
04688	Benzoic acid	65-85-0	650		170	520	1
04688	Benzyl alcohol	100-51-6	1,700		170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	1,600		17	170	1
04688	Butylbenzylphthalate	85-68-7	1,800		17	170	1
04688	Di-n-butylphthalate	84-74-2	1,700		17	170	1
04688	Carbazole	86-74-8	1,700		17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	1,700		35	170	1
04688	4-Chloroaniline	106-47-8	1,200		70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,800		17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700		17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,600		17	170	1
04688	2-Chloronaphthalene	91-58-7	1,500		17	170	1
04688	2-Chlorophenol	95-57-8	1,800		17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,700		35	170	1
04688	Chrysene	218-01-9	1,700		17	170	1
04688	Dibenz(a,h)anthracene	53-70-3	1,500		17	170	1
04688	Dibenzofuran	132-64-9	1,700		17	170	1
04688	1,2-Dichlorobenzene	95-50-1	1,600		17	170	1
04688	1,3-Dichlorobenzene	541-73-1	1,600		17	170	1
04688	1,4-Dichlorobenzene	106-46-7	1,600		17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,000		100	350	1
04688	2,4-Dichlorophenol	120-83-2	1,800		17	170	1
04688	Diethylphthalate	84-66-2	1,700		17	170	1
04688	2,4-Dimethylphenol	105-67-9	1,700		35	170	1
04688	3,5-Dimethylphenol	108-68-9	1,900		35	170	1
04688	Dimethylphthalate	131-11-3	1,700		17	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	850		170	520	1
04688	2,4-Dinitrophenol	51-28-5	820	J	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	1,700		35	170	1
04688	2,6-Dinitrotoluene	606-20-2	1,800		17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	1,800		17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,800		17	350	1
04688	Fluoranthene	206-44-0	1,700		17	170	1
04688	Fluorene	86-73-7	1,700		17	170	1
04688	Hexachlorobenzene	118-74-1	1,700		17	170	1
04688	Hexachlorobutadiene	87-68-3	1,600		70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	2,600		170	520	1
04688	Hexachloroethane	67-72-1	1,600		17	170	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,500		17	170	1
04688	Isophorone	78-59-1	1,700		17	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164624
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1-Methylnaphthalene	90-12-0	1,700	17	170	1
04688	2-Methylnaphthalene	91-57-6	1,600	17	170	1
04688	2-Methylphenol	95-48-7	1,800	35	170	1
04688	4-Methylphenol	106-44-5	1,700	35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,600	17	170	1
04688	2-Nitroaniline	88-74-4	1,900	17	170	1
04688	3-Nitroaniline	99-09-2	1,700	35	170	1
04688	4-Nitroaniline	100-01-6	1,300	70	170	1
04688	Nitrobenzene	98-95-3	1,700	17	170	1
04688	2-Nitrophenol	88-75-5	1,600	17	170	1
04688	4-Nitrophenol	100-02-7	1,700	170	520	1
04688	N-Nitrosodimethylamine	62-75-9	1,500	35	170	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,600	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	1,700	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,600	17	170	1
04688	Pentachlorophenol	87-86-5	1,200	170	520	1
04688	Phenanthrene	85-01-8	1,700	17	170	1
04688	Phenol	108-95-2	1,800	17	170	1
04688	Pyrene	129-00-0	1,900	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,700	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	1,800	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	1,800	35	170	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	27	0.70	1.7	1
10138	Acenaphthylene	208-96-8	28	0.35	1.7	1
10138	Anthracene	120-12-7	28	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	30	0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	28	0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	28	0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	25	0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	26	0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	35	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	37	6.3	19	1
10138	Chrysene	218-01-9	37	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	24	0.70	1.7	1
10138	Diethylphthalate	84-66-2	31	6.3	19	1
10138	Dimethylphthalate	131-11-3	32	6.3	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	38	6.3	19	1
10138	Fluoranthene	206-44-0	30	0.70	1.7	1
10138	Fluorene	86-73-7	28	0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	24	0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	29	0.70	1.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164624
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	25		0.70	1.7	1
10138	Naphthalene	91-20-3	26		0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	26		0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	36		6.3	19	1
10138	Phenanthrene	85-01-8	27		0.70	1.7	1
10138	Pyrene	129-00-0	30		0.70	1.7	1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 6.6 ug/kg. The blank value was not subtracted from the analytical result.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	8.0		1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.4	1
10401	2,4-DB	94-82-6	11		0.65	1.8	1
10401	Dicamba	1918-00-9	0.76	J	0.42	1.3	1
10401	Dinoseb	88-85-7	0.87	J	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	9.9		0.83	1.8	1
10401	MCPA	94-74-6	1,800		79	260	1
10401	MCPP (Mecoprop)	93-65-2	820		78	260	1
10401	2,4,5-T	93-76-5	0.56		0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.87		0.078	0.18	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.33		0.069	0.18	1
01363	Alpha BHC	319-84-6	0.44		0.035	0.18	1
01363	Beta BHC	319-85-7	0.41		0.063	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.42		0.035	0.18	1
01363	Chlordane	57-74-9	0.83	U	0.83	3.5	1
01363	p,p-DDD	72-54-8	1.3		0.069	0.35	1
01363	p,p-DDE	72-55-9	0.72		0.069	0.35	1
01363	p,p-DDT	50-29-3	1.2		0.069	0.35	1
01363	Delta BHC	319-86-8	0.28		0.038	0.18	1
01363	Dieldrin	60-57-1	1.0		0.069	0.35	1
01363	Endosulfan I	959-98-8	0.41		0.046	0.18	1
01363	Endosulfan II	33213-65-9	0.74		0.069	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.74		0.069	0.35	1
01363	Endrin	72-20-8	0.95		0.069	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.53		0.069	0.35	1
01363	Endrin Ketone	53494-70-5	0.65		0.069	0.35	1
01363	Heptachlor	76-44-8	0.50		0.063	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.36		0.035	0.18	1
01363	Methoxychlor	72-43-5	6.0		0.35	1.7	1
01363	Mirex	2385-85-5	0.069	U	0.069	0.35	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164624
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.0	U	1.0	3.4	1
10225	PCB-1016	12674-11-2	25		0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52	U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54	U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52	U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34	U	0.34	1.8	1
10225	PCB-1254	11097-69-1	9.9		0.34	1.8	1
10225	PCB-1260	11096-82-5	27		0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34	U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34	U	0.34	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,700		5.14	20.4	1
07914	Boron	7440-42-8	206		0.910	5.11	1
01650	Calcium	7440-70-2	2,930		6.27	20.4	1
01654	Iron	7439-89-6	10,100		4.82	20.4	1
01656	Lithium	7439-93-2	110		0.22	2.0	1
01657	Magnesium	7439-95-4	2,040		2.60	10.2	1
06958	Manganese	7439-96-5	181		0.0797	0.511	1
10145	Phosphorus	7723-14-0	362		0.572	10.2	1
01662	Potassium	7440-09-7	2,590		18.4	51.1	1
01667	Sodium	7440-23-5	1,120		38.1	102	1
07968	Strontium	7440-24-6	126		0.0634	0.511	1
06969	Tin	7440-31-5	394		1.02	10.2	1
06970	Titanium	7440-32-6	540		0.388	1.02	1
10146	Zirconium	7440-67-7	105		0.859	5.11	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.989		0.0619	0.206	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.47		0.0619	0.413	2
06126	Barium	7440-39-3	57.9		0.112	0.413	2
06127	Beryllium	7440-41-7	1.11		0.0165	0.103	2
06128	Cadmium	7440-43-9	1.22		0.0372	0.103	2
06131	Chromium	7440-47-3	19.8		0.124	0.413	2
06132	Cobalt	7440-48-4	51.3		0.0206	0.103	2
06133	Copper	7440-50-8	16.0		0.0681	0.413	2
06135	Lead	7439-92-1	9.36		0.0107	0.206	2
06138	Molybdenum	7439-98-7	11.0		0.0516	0.103	2
06139	Nickel	7440-02-0	16.0		0.103	0.413	2
06141	Selenium	7782-49-2	2.02		0.0413	0.413	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164624
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06142	Silver	7440-22-4	10.4	0.0124	0.103	2
06145	Thallium	7440-28-0	0.557	0.0310	0.103	2
06148	Vanadium	7440-62-2	29.3	0.0227	0.103	2
06149	Zinc	7440-66-6	35.7	0.578	3.10	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.173	0.0029	0.103	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3	n.a.	4.1	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 02:16	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 09:44	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 18:08	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 22:09	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 21:21	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 05:33	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/29/2010 08:38	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 08:38	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/29/2010 08:38	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164624
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103515708008	12/29/2010 08:38	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	103515708008	12/29/2010 08:38	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:26	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 08:38	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:12	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:12	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:12	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:12	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:33	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5DUP Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164625
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	6,850		5.19	20.6	1
07914	Boron	7440-42-8	5.13	J	0.919	5.16	1
01650	Calcium	7440-70-2	1,770		6.33	20.6	1
01654	Iron	7439-89-6	9,150		4.86	20.6	1
01656	Lithium	7439-93-2	5.9		0.23	2.1	1
01657	Magnesium	7439-95-4	1,420		2.62	10.3	1
06958	Manganese	7439-96-5	117		0.0805	0.516	1
10145	Phosphorus	7723-14-0	238		0.578	10.3	1
01662	Potassium	7440-09-7	1,160		18.6	51.6	1
01667	Sodium	7440-23-5	40.7	J	38.5	103	1
07968	Strontium	7440-24-6	24.7		0.0640	0.516	1
06969	Tin	7440-31-5	1.93	J	1.03	10.3	1
06970	Titanium	7440-32-6	314		0.392	1.03	1
10146	Zirconium	7440-67-7	2.48	J	0.867	5.16	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.146	J	0.0619	0.206	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	3.39		0.0619	0.413	2
06126	Barium	7440-39-3	51.4		0.112	0.413	2
06127	Beryllium	7440-41-7	0.257		0.0165	0.103	2
06128	Cadmium	7440-43-9	0.119		0.0372	0.103	2
06131	Chromium	7440-47-3	8.57		0.124	0.413	2
06132	Cobalt	7440-48-4	3.84		0.0206	0.103	2
06133	Copper	7440-50-8	5.43		0.0681	0.413	2
06135	Lead	7439-92-1	6.01		0.0107	0.206	2
06138	Molybdenum	7439-98-7	0.335		0.0516	0.103	2
06139	Nickel	7440-02-0	5.13		0.103	0.413	2
06141	Selenium	7782-49-2	0.116	J	0.0413	0.413	2
06142	Silver	7440-22-4	0.0173	J	0.0124	0.103	2
06145	Thallium	7440-28-0	0.0933	J	0.0310	0.103	2
06148	Vanadium	7440-62-2	17.1		0.0227	0.103	2
06149	Zinc	7440-66-6	25.5		0.578	3.10	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0092	J	0.0029	0.100	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3		0.83	1.0	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4	U	9.4	31.3	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.56	J	0.21	1.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5DUP Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164625
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	419	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.39	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3	n.a.	4.1	0.50	0.50	1
11626	28a Moisture Content by 160.3	n.a.	4.0	0.50	0.50	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/29/2010 08:30	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 08:30	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/29/2010 08:30	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/29/2010 08:30	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	103515708008	12/29/2010 08:30	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:18	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 08:30	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:06	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5DUP Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164625
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12005 SDG#: DE038-02DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:06	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:06	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:06	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:31	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 03:26	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 13:54	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10363243202A	01/02/2011 16:09	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164626
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

11805 SDG#: DE038-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	170	U	170	520	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U	170	520	1
04688	Benzyl alcohol	100-51-6	170	U	170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U	17	170	1
04688	Carbazole	86-74-8	17	U	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	170	1
04688	4-Chloroaniline	106-47-8	70	U	70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U	17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U	17	170	1
04688	2-Chlorophenol	95-57-8	17	U	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	170	1
04688	Dibenzofuran	132-64-9	17	U	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U	100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U	17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U	170	520	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	37	J	17	350	1
04688	Hexachlorobenzene	118-74-1	17	U	17	170	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U	170	520	1
04688	Hexachloroethane	67-72-1	17	U	17	170	1
04688	Isophorone	78-59-1	17	U	17	170	1
04688	2-Methylphenol	95-48-7	35	U	35	170	1
04688	4-Methylphenol	106-44-5	35	U	35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U	17	170	1
04688	3-Nitroaniline	99-09-2	35	U	35	170	1
04688	4-Nitroaniline	100-01-6	70	U	70	170	1
04688	Nitrobenzene	98-95-3	17	U	17	170	1
04688	2-Nitrophenol	88-75-5	17	U	17	170	1
04688	4-Nitrophenol	100-02-7	170	U	170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U	170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164626
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

11805 SDG#: DE038-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	17	U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	170	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.7	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.7	1
10138	Anthracene	120-12-7	1.1	J	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	7.5		0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	6.5		0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	8.9		0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	3.8		0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	4.2		0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	7.1	J	6.3	19	1
10138	Chrysene	218-01-9	8.8		0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.90	J	0.70	1.7	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluoranthene	206-44-0	9.4		0.70	1.7	1
10138	Fluorene	86-73-7	0.70	U	0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	2.8		0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.70	U	0.70	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.70	U	0.70	1.7	1
10138	Naphthalene	91-20-3	0.70	U	0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	3.0		0.70	1.7	1
10138	Pyrene	129-00-0	14		0.70	1.7	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.4	1
10401	2,4-DB	94-82-6	4.5		0.65	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8	1
10401	MCPA	94-74-6	530	U	530	530	1
10401	MCPP (Mecoprop)	93-65-2	460	U	460	460	1
10401	2,4,5-T	93-76-5	0.086	U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.078	U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164626
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

11805 SDG#: DE038-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.17	1
01363	Beta BHC	319-85-7	0.063	U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.17	1
01363	Chlordane	57-74-9	0.84	U	0.84	3.6	1
01363	p,p-DDD	72-54-8	0.069	U	0.069	0.36	1
01363	p,p-DDE	72-55-9	0.069	U	0.069	0.36	1
01363	p,p-DDT	50-29-3	0.38	U	0.38	0.38	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.094	U	0.094	0.36	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069	U	0.069	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.069	U	0.069	0.36	1
01363	Endrin	72-20-8	0.069	U	0.069	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.096	U	0.096	0.36	1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.36	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.036	U	0.036	0.17	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.7	1
01363	Mirex	2385-85-5	0.19	U	0.19	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0	3.5	1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0	3.5	1
10225	Aroclor 5460	11126-42-4	3.3	J	1.0	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.52	U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54	U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52	U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35	U	0.35	1.8	1
10225	PCB-1260	11096-82-5	2.6		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Metals	**SW-846 6010B**	**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164626
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

11805 SDG#: DE038-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,100		5.16	20.5	1
07914	Boron	7440-42-8	8.66		0.913	5.13	1
01650	Calcium	7440-70-2	5,160		6.29	20.5	1
01654	Iron	7439-89-6	25,800		4.83	20.5	1
01656	Lithium	7439-93-2	19.2		0.23	2.1	1
01657	Magnesium	7439-95-4	5,140		2.60	10.3	1
06958	Manganese	7439-96-5	358		0.0800	0.513	1
10145	Phosphorus	7723-14-0	533		0.574	10.3	1
01662	Potassium	7440-09-7	3,890		18.5	51.3	1
01667	Sodium	7440-23-5	174		38.3	103	1
07968	Strontium	7440-24-6	29.3		0.0636	0.513	1
06969	Tin	7440-31-5	2.61	J	1.03	10.3	1
06970	Titanium	7440-32-6	1,500		0.390	1.03	1
10146	Zirconium	7440-67-7	0.861	U	0.861	5.13	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.149	J	0.0621	0.207	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.46		0.0621	0.414	2
06126	Barium	7440-39-3	133		0.112	0.414	2
06127	Beryllium	7440-41-7	0.467		0.0166	0.104	2
06128	Cadmium	7440-43-9	0.183		0.0373	0.104	2
06131	Chromium	7440-47-3	25.4		0.124	0.414	2
06132	Cobalt	7440-48-4	6.76		0.0207	0.104	2
06133	Copper	7440-50-8	16.3		0.0684	0.414	2
06135	Lead	7439-92-1	8.16		0.0108	0.207	2
06138	Molybdenum	7439-98-7	1.13		0.0518	0.104	2
06139	Nickel	7440-02-0	16.2		0.104	0.414	2
06141	Selenium	7782-49-2	0.0656	J	0.0414	0.414	2
06142	Silver	7440-22-4	0.0221	J	0.0124	0.104	2
06145	Thallium	7440-28-0	0.271		0.0311	0.104	2
06148	Vanadium	7440-62-2	44.0		0.0228	0.104	2
06149	Zinc	7440-66-6	79.7		0.580	3.11	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0376	J	0.0029	0.102	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3		0.84	1.0	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4	U	9.4	31.4	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.52	J	0.21	1.0	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164626
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

11805 SDG#: DE038-03

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	393	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	6.94	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	4.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 03:26	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/05/2011 11:40	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 18:35	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 22:23	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 21:40	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 05:52	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:17	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 08:56	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164626
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

11805 SDG#: DE038-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:17	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:05	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:05	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:44	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 08:56	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:22	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/31/2010 06:54	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:22	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:22	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:22	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:35	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 04:08	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 15:30	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 16:33	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164627
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

11905 SDG#: DE038-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	72	U	72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U	720	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	20	J	18	360	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U	72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	72	U	72	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	540	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164627
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

11905 SDG#: DE038-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8	1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.91	J	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.87	J	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	1.6	J	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	1.2	J	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.73	J	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	19	1
10138	Di-n-butylphthalate	84-74-2	7.7	J	6.5	19	1
10138	Chrysene	218-01-9	1.8		0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	19	1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	19	1
10138	Fluoranthene	206-44-0	1.5	J	0.72	1.8	1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	U	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.72	U	0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.72	U	0.72	1.8	1
10138	Naphthalene	91-20-3	0.72	U	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	7.2	J	6.5	19	1
10138	Phenanthrene	85-01-8	1.1	J	0.72	1.8	1
10138	Pyrene	129-00-0	2.0		0.72	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U	4.8	9.7	1
10401	2,4-DB	94-82-6	4.3	U	4.3	4.3	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.87	U	0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87	U	0.87	1.8	1
10401	MCPA	94-74-6	310	U	310	310	1
10401	MCPP (Mecoprop)	93-65-2	810	U	810	2,700	1
10401	2,4,5-T	93-76-5	0.089	U	0.089	0.18	1
10401	2,4,5-TP	93-72-1	0.081	U	0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164627
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

11905 SDG#: DE038-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.071	U	0.071	0.18	1
01363	Alpha BHC	319-84-6	0.037	U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.065	U	0.065	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037	U	0.037	0.18	1
01363	Chlordane	57-74-9	0.87	U	0.87	3.7	1
01363	p,p-DDD	72-54-8	0.68	U	0.68	0.68	1
01363	p,p-DDE	72-55-9	0.15	U	0.15	0.37	1
01363	p,p-DDT	50-29-3	0.22	U	0.22	0.37	1
01363	Delta BHC	319-86-8	0.051	J	0.039	0.18	1
01363	Dieldrin	60-57-1	0.071	U	0.071	0.37	1
01363	Endosulfan I	959-98-8	0.048	U	0.048	0.18	1
01363	Endosulfan II	33213-65-9	0.075	U	0.075	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.071	U	0.071	0.37	1
01363	Endrin	72-20-8	0.071	U	0.071	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.089	U	0.089	0.37	1
01363	Endrin Ketone	53494-70-5	0.071	U	0.071	0.37	1
01363	Heptachlor	76-44-8	0.065	U	0.065	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.037	U	0.037	0.18	1
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8	1
01363	Mirex	2385-85-5	0.071	U	0.071	0.37	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.1	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.2	U	2.2	7.1	2
10225	Aroclor 5442	12642-23-8	2.2	U	2.2	7.1	2
10225	Aroclor 5460	11126-42-4	3.8	J	2.2	7.1	2
10225	PCB-1016	12674-11-2	0.71	U	0.71	3.7	2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.7	2
10225	PCB-1232	11141-16-5	1.1	U	1.1	3.7	2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.7	2
10225	PCB-1248	12672-29-6	0.71	U	0.71	3.7	2
10225	PCB-1254	11097-69-1	31		0.71	3.7	2
10225	PCB-1260	11096-82-5	0.71	U	0.71	3.7	2
10225	PCB-1262	37324-23-5	0.71	U	0.71	3.7	2
10225	PCB-1268	11100-14-4	0.71	U	0.71	3.7	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Metals	**SW-846 6010B**	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164627
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

11905 SDG#: DE038-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,600		5.29	21.0	1
07914	Boron	7440-42-8	9.24		0.935	5.25	1
01650	Calcium	7440-70-2	3,230		6.44	21.0	1
01654	Iron	7439-89-6	28,000		4.95	21.0	1
01656	Lithium	7439-93-2	24.5		0.23	2.1	1
01657	Magnesium	7439-95-4	5,420		2.67	10.5	1
06958	Manganese	7439-96-5	427		0.0820	0.525	1
10145	Phosphorus	7723-14-0	434		0.588	10.5	1
01662	Potassium	7440-09-7	4,930		18.9	52.5	1
01667	Sodium	7440-23-5	98.1	J	39.2	105	1
07968	Strontium	7440-24-6	24.1		0.0651	0.525	1
06969	Tin	7440-31-5	3.09	J	1.05	10.5	1
06970	Titanium	7440-32-6	1,640		0.399	1.05	1
10146	Zirconium	7440-67-7	1.08	J	0.883	5.25	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.222		0.0643	0.214	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.66		0.0643	0.429	2
06126	Barium	7440-39-3	170		0.116	0.429	2
06127	Beryllium	7440-41-7	0.845		0.0171	0.107	2
06128	Cadmium	7440-43-9	0.235		0.0386	0.107	2
06131	Chromium	7440-47-3	28.8		0.129	0.429	2
06132	Cobalt	7440-48-4	7.67		0.0214	0.107	2
06133	Copper	7440-50-8	15.1		0.0707	0.429	2
06135	Lead	7439-92-1	8.79		0.0111	0.214	2
06138	Molybdenum	7439-98-7	0.769		0.0536	0.107	2
06139	Nickel	7440-02-0	18.0		0.107	0.429	2
06141	Selenium	7782-49-2	0.161	J	0.0429	0.429	2
06142	Silver	7440-22-4	0.0445	J	0.0129	0.107	2
06145	Thallium	7440-28-0	0.340		0.0321	0.107	2
06148	Vanadium	7440-62-2	46.8		0.0236	0.107	2
06149	Zinc	7440-66-6	77.5		0.600	3.21	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0030	U	0.0030	0.105	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.4		0.87	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7	U	9.7	32.5	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.57	J	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164627
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

11905 SDG#: DE038-04

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	416	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.03	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	7.6	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 04:00	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/05/2011 12:11	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 19:03	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 22:38	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 21:58	Lindsey K Lafferty	2
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 06:10	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:20	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/30/2010 10:13	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:00	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164627
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

11905 SDG#: DE038-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:20	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:13	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:13	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:48	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:00	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:36	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 04:23	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 15:54	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10363243202A	01/02/2011 16:57	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182101B	12/16/2010 12:10	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039401B	12/16/2010 12:10	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164628
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

24005 SDG#: DE038-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	170	U	170	520	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U	170	520	1
04688	Benzyl alcohol	100-51-6	170	U	170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U	17	170	1
04688	Carbazole	86-74-8	17	U	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	170	1
04688	4-Chloroaniline	106-47-8	69	U	69	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U	17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U	17	170	1
04688	2-Chlorophenol	95-57-8	17	U	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	170	1
04688	Dibenzofuran	132-64-9	17	U	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U	100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U	17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U	170	520	1
04688	2,4-Dinitrophenol	51-28-5	690	U	690	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U	17	350	1
04688	Hexachlorobenzene	118-74-1	17	U	17	170	1
04688	Hexachlorobutadiene	87-68-3	69	U	69	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U	170	520	1
04688	Hexachloroethane	67-72-1	17	U	17	170	1
04688	Isophorone	78-59-1	17	U	17	170	1
04688	2-Methylphenol	95-48-7	35	U	35	170	1
04688	4-Methylphenol	106-44-5	35	U	35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U	17	170	1
04688	3-Nitroaniline	99-09-2	35	U	35	170	1
04688	4-Nitroaniline	100-01-6	69	U	69	170	1
04688	Nitrobenzene	98-95-3	17	U	17	170	1
04688	2-Nitrophenol	88-75-5	17	U	17	170	1
04688	4-Nitrophenol	100-02-7	170	U	170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U	170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164628
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

24005 SDG#: DE038-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	17	U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	170	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.69	U	0.69	1.7	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.7	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	0.69	U	0.69	1.7	1
10138	Benzo(a)pyrene	50-32-8	0.69	U	0.69	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	1.0	J	0.69	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	0.69	U	0.69	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	0.69	U	0.69	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19	1
10138	Chrysene	218-01-9	0.81	J	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.69	U	0.69	1.7	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluoranthene	206-44-0	0.96	J	0.69	1.7	1
10138	Fluorene	86-73-7	0.69	U	0.69	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.69	U	0.69	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.69	U	0.69	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.69	U	0.69	1.7	1
10138	Naphthalene	91-20-3	0.69	U	0.69	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.69	U	0.69	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	0.69	U	0.69	1.7	1
10138	Pyrene	129-00-0	1.2	J	0.69	1.7	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.4	1
10401	2,4-DB	94-82-6	2.7		0.65	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.83	U	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83	U	0.83	1.8	1
10401	MCPA	94-74-6	200	U	200	260	1
10401	MCPP (Mecoprop)	93-65-2	150	J	78	260	1
10401	2,4,5-T	93-76-5	0.085	U	0.085	0.18	1
10401	2,4,5-TP	93-72-1	0.078	U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164628
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

24005 SDG#: DE038-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.035	U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.063	U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035	U	0.035	0.17	1
01363	Chlordane	57-74-9	0.83	U	0.83	3.5	1
01363	p,p-DDD	72-54-8	0.069	U	0.069	0.35	1
01363	p,p-DDE	72-55-9	0.069	U	0.069	0.35	1
01363	p,p-DDT	50-29-3	0.22	U	0.22	0.35	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.15	U	0.15	0.35	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069	U	0.069	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.069	U	0.069	0.35	1
01363	Endrin	72-20-8	0.069	U	0.069	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.11	U	0.11	0.35	1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.35	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.066	U	0.066	0.17	1
01363	Methoxychlor	72-43-5	0.35	U	0.35	1.7	1
01363	Mirex	2385-85-5	0.069	U	0.069	0.35	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	4.8		1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34	U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52	U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54	U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52	U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34	U	0.34	1.8	1
10225	PCB-1254	11097-69-1	0.34	U	0.34	1.8	1
10225	PCB-1260	11096-82-5	2.2		0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34	U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34	U	0.34	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		mg/kg		mg/kg	mg/kg	
01643	Aluminum	7429-90-5	17,400		5.04	20.0	1
07914	Boron	7440-42-8	8.65		0.891	5.01	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164628
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

24005 SDG#: DE038-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	6,410		6.14	20.0	1
01654	Iron	7439-89-6	22,800		4.72	20.0	1
01656	Lithium	7439-93-2	22.2		0.22	2.0	1
01657	Magnesium	7439-95-4	5,000		2.54	10.0	1
06958	Manganese	7439-96-5	315		0.0781	0.501	1
10145	Phosphorus	7723-14-0	458		0.561	10.0	1
01662	Potassium	7440-09-7	3,480		18.0	50.1	1
01667	Sodium	7440-23-5	135		37.4	100	1
07968	Strontium	7440-24-6	35.3		0.0621	0.501	1
06969	Tin	7440-31-5	2.62	J	1.00	10.0	1
06970	Titanium	7440-32-6	1,450		0.381	1.00	1
10146	Zirconium	7440-67-7	2.11	J	0.841	5.01	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.113	J	0.0619	0.206	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.41		0.0619	0.413	2
06126	Barium	7440-39-3	129		0.111	0.413	2
06127	Beryllium	7440-41-7	0.557		0.0165	0.103	2
06128	Cadmium	7440-43-9	0.147		0.0371	0.103	2
06131	Chromium	7440-47-3	20.6		0.124	0.413	2
06132	Cobalt	7440-48-4	6.25		0.0206	0.103	2
06133	Copper	7440-50-8	12.2		0.0681	0.413	2
06135	Lead	7439-92-1	6.15		0.0107	0.206	2
06138	Molybdenum	7439-98-7	0.583		0.0516	0.103	2
06139	Nickel	7440-02-0	12.8		0.103	0.413	2
06141	Selenium	7782-49-2	0.0812	J	0.0413	0.413	2
06142	Silver	7440-22-4	0.0304	J	0.0124	0.103	2
06145	Thallium	7440-28-0	0.274		0.0309	0.103	2
06148	Vanadium	7440-62-2	42.0		0.0227	0.103	2
06149	Zinc	7440-66-6	71.8		0.578	3.09	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0229	J	0.0029	0.102	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6		0.83	1.0	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4	U	9.4	31.3	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.0	1
	ASTM D1498		**mV**		**mV**	**mV**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164628
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

24005 SDG#: DE038-05

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	402	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	8.20	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	4.0	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 04:35	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 11:50	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 20:25	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 22:52	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 22:17	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 06:29	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:27	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:07	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164628
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

24005 SDG#: DE038-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:27	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:17	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:17	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:52	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:07	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:34	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:34	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:34	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:34	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:39	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 05:05	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 16:18	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 17:05	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164629
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

10905 SDG#: DE038-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	J	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164629
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

10905 SDG#: DE038-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	1.4	J	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	15		0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	11		0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	15		0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	4.5		0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	6.4		0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.7	J	6.4	19	1
10138	Chrysene	218-01-9	17		0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.4	J	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluoranthene	206-44-0	24		0.71	1.8	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	4.8		0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
10138	Phenanthrene	85-01-8	7.6		0.71	1.8	1
10138	Pyrene	129-00-0	30		0.71	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	4.2		0.66	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	100	U	100	270	1
10401	MCPP (Mecoprop)	93-65-2	340		80	270	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164629
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

10905 SDG#: DE038-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070	U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.070	U	0.070	0.36	1
01363	p,p-DDT	50-29-3	0.39	U	0.39	0.39	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.11	U	0.11	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.12	U	0.12	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.036	U	0.036	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	2.4	J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35	U	0.35	1.8	1
10225	PCB-1260	11096-82-5	2.5		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		mg/kg		mg/kg	mg/kg	
01643	Aluminum	7429-90-5	18,600		5.13	20.4	1
07914	Boron	7440-42-8	9.42		0.908	5.10	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164629
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

10905 SDG#: DE038-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	4,040		6.26	20.4	1
01654	Iron	7439-89-6	26,500		4.81	20.4	1
01656	Lithium	7439-93-2	23.5		0.22	2.0	1
01657	Magnesium	7439-95-4	4,670		2.59	10.2	1
06958	Manganese	7439-96-5	307		0.0796	0.510	1
10145	Phosphorus	7723-14-0	427		0.572	10.2	1
01662	Potassium	7440-09-7	3,240		18.4	51.0	1
01667	Sodium	7440-23-5	133		38.1	102	1
07968	Strontium	7440-24-6	25.5		0.0633	0.510	1
06969	Tin	7440-31-5	2.66	J	1.02	10.2	1
06970	Titanium	7440-32-6	1,400		0.388	1.02	1
10146	Zirconium	7440-67-7	1.54	J	0.857	5.10	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.127	J	0.0618	0.206	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.97		0.0618	0.412	2
06126	Barium	7440-39-3	120		0.111	0.412	2
06127	Beryllium	7440-41-7	0.720		0.0165	0.103	2
06128	Cadmium	7440-43-9	0.152		0.0371	0.103	2
06131	Chromium	7440-47-3	21.5		0.124	0.412	2
06132	Cobalt	7440-48-4	5.79		0.0206	0.103	2
06133	Copper	7440-50-8	16.1		0.0680	0.412	2
06135	Lead	7439-92-1	6.93		0.0107	0.206	2
06138	Molybdenum	7439-98-7	0.646		0.0515	0.103	2
06139	Nickel	7440-02-0	12.6		0.103	0.412	2
06141	Selenium	7782-49-2	0.0757	J	0.0412	0.412	2
06142	Silver	7440-22-4	0.0289	J	0.0124	0.103	2
06145	Thallium	7440-28-0	0.288		0.0309	0.103	2
06148	Vanadium	7440-62-2	43.7		0.0227	0.103	2
06149	Zinc	7440-66-6	64.5		0.577	3.09	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0156	J	0.0029	0.0995	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.3		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	31.8	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164629
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

10905 SDG#: DE038-06

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	410	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	8.11	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 05:09	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 12:22	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 20:52	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 23:06	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 22:36	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 06:47	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:30	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:11	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164629
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

10905 SDG#: DE038-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:30	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:21	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:21	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:55	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:11	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:37	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:37	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:37	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:37	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:40	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 05:19	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 16:42	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 17:21	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164630
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12205 SDG#: DE038-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164630
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12205 SDG#: DE038-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.71	U	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.71	U	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.90	J	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.71	U	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.71	U	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19	1
10138	Chrysene	218-01-9	0.97	J	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluoranthene	206-44-0	0.92	J	0.71	1.8	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	0.77	J	0.71	1.8	1
10138	Pyrene	129-00-0	1.0	J	0.71	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.5	1
10401	2,4-DB	94-82-6	8.0		0.66	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	990		80	260	1
10401	MCPP (Mecoprop)	93-65-2	240	J	79	260	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.33	U	0.33	0.33	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164630
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12205 SDG#: DE038-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.063	U	0.063	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070	U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.13	U	0.13	0.36	1
01363	p,p-DDT	50-29-3	0.16	U	0.16	0.36	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070	U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.036	U	0.036	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	2.0		0.35	1.8	1
10225	PCB-1260	11096-82-5	1.0	J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,800		5.27	21.0	1
07914	Boron	7440-42-8	7.70		0.932	5.24	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164630
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12205 SDG#: DE038-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	2,290		6.42	21.0	1
01654	Iron	7439-89-6	16,300		4.93	21.0	1
01656	Lithium	7439-93-2	15.4		0.23	2.1	1
01657	Magnesium	7439-95-4	3,150		2.66	10.5	1
06958	Manganese	7439-96-5	233		0.0817	0.524	1
10145	Phosphorus	7723-14-0	369		0.587	10.5	1
01662	Potassium	7440-09-7	3,020		18.9	52.4	1
01667	Sodium	7440-23-5	70.0	J	39.1	105	1
07968	Strontium	7440-24-6	21.1		0.0650	0.524	1
06969	Tin	7440-31-5	2.31	J	1.05	10.5	1
06970	Titanium	7440-32-6	902		0.398	1.05	1
10146	Zirconium	7440-67-7	1.81	J	0.880	5.24	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.103	J	0.0611	0.204	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.98		0.0611	0.407	2
06126	Barium	7440-39-3	102		0.110	0.407	2
06127	Beryllium	7440-41-7	0.531		0.0163	0.102	2
06128	Cadmium	7440-43-9	0.182		0.0366	0.102	2
06131	Chromium	7440-47-3	19.2		0.122	0.407	2
06132	Cobalt	7440-48-4	5.19		0.0204	0.102	2
06133	Copper	7440-50-8	10.9		0.0672	0.407	2
06135	Lead	7439-92-1	7.63		0.0106	0.204	2
06138	Molybdenum	7439-98-7	0.566		0.0509	0.102	2
06139	Nickel	7440-02-0	11.6		0.102	0.407	2
06141	Selenium	7782-49-2	0.120	J	0.0407	0.407	2
06142	Silver	7440-22-4	0.0169	J	0.0122	0.102	2
06145	Thallium	7440-28-0	0.229		0.0305	0.102	2
06148	Vanadium	7440-62-2	33.8		0.0224	0.102	2
06149	Zinc	7440-66-6	51.2		0.570	3.05	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0044	J	0.0028	0.0988	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.7	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.43	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164630
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12205 SDG#: DE038-07

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	444	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.58	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.5	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 09:03	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 12:54	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 21:20	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 23:20	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 22:54	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 07:06	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:34	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:15	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164630
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12205 SDG#: DE038-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:34	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:25	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:25	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 14:59	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:15	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:40	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:40	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:40	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:40	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:42	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 05:34	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 17:06	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10363243202A	01/02/2011 17:45	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164631
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12105 SDG#: DE038-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164631
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12105 SDG#: DE038-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.71	U	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.71	U	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.71	U	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.71	U	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.71	U	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19	1
10138	Chrysene	218-01-9	0.35	U	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluoranthene	206-44-0	0.71	U	0.71	1.8	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
10138	Phenanthrene	85-01-8	0.71	U	0.71	1.8	1
10138	Pyrene	129-00-0	0.71	U	0.71	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.5	1
10401	2,4-DB	94-82-6	4.4		0.66	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	420	U	420	420	1
10401	MCPP (Mecoprop)	93-65-2	240	U	240	270	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164631
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12105 SDG#: DE038-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070	U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.093	J	0.070	0.36	1
01363	p,p-DDT	50-29-3	0.36		0.070	0.36	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070	U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.13	J	0.036	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1

The LCS recoveries for various compounds are outside the QC limits.
Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35	U	0.35	1.8	1
10225	PCB-1260	11096-82-5	0.35	U	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,500		5.23	20.8	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164631
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12105 SDG#: DE038-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
07914	Boron	7440-42-8	8.99		0.925	5.20	1
01650	Calcium	7440-70-2	3,820		6.37	20.8	1
01654	Iron	7439-89-6	22,300		4.90	20.8	1
01656	Lithium	7439-93-2	21.2		0.23	2.1	1
01657	Magnesium	7439-95-4	4,540		2.64	10.4	1
06958	Manganese	7439-96-5	341		0.0811	0.520	1
10145	Phosphorus	7723-14-0	458		0.582	10.4	1
01662	Potassium	7440-09-7	3,780		18.7	52.0	1
01667	Sodium	7440-23-5	86.8	J	38.8	104	1
07968	Strontium	7440-24-6	20.4		0.0645	0.520	1
06969	Tin	7440-31-5	2.53	J	1.04	10.4	1
06970	Titanium	7440-32-6	1,280		0.395	1.04	1
10146	Zirconium	7440-67-7	1.93	J	0.873	5.20	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.154	J	0.0624	0.208	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.88		0.0624	0.416	2
06126	Barium	7440-39-3	124		0.112	0.416	2
06127	Beryllium	7440-41-7	0.623		0.0166	0.104	2
06128	Cadmium	7440-43-9	0.227		0.0374	0.104	2
06131	Chromium	7440-47-3	22.3		0.125	0.416	2
06132	Cobalt	7440-48-4	6.14		0.0208	0.104	2
06133	Copper	7440-50-8	12.6		0.0686	0.416	2
06135	Lead	7439-92-1	11.1		0.0108	0.208	2
06138	Molybdenum	7439-98-7	0.664		0.0520	0.104	2
06139	Nickel	7440-02-0	14.2		0.104	0.416	2
06141	Selenium	7782-49-2	0.158	J	0.0416	0.416	2
06142	Silver	7440-22-4	0.0291	J	0.0125	0.104	2
06145	Thallium	7440-28-0	0.262		0.0312	0.104	2
06148	Vanadium	7440-62-2	39.1		0.0229	0.104	2
06149	Zinc	7440-66-6	62.1		0.582	3.12	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0048	J	0.0028	0.0990	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.9		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.8	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.43	J	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164631
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12105 SDG#: DE038-08

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	447	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.49	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 09:37	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 13:25	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 21:48	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 23:35	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 07:24	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:37	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:19	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:37	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164631
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12105 SDG#: DE038-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:29	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:29	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:03	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:19	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:43	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/31/2010 06:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:43	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:43	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:43	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:43	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 05:48	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 17:30	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10363243202A	01/02/2011 18:01	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164632
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

05405 SDG#: DE038-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Anthracene	120-12-7	30	J	18	180	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,600	1
04688	Benzo(a)anthracene	56-55-3	110	J	18	180	1
04688	Benzo(a)pyrene	50-32-8	69	J	18	180	1
04688	Benzo(b)fluoranthene	205-99-2	74	J	18	180	1
04688	Benzo(g,h,i)perylene	191-24-2	31	J	18	180	1
04688	Benzo(k)fluoranthene	207-08-9	32	J	18	180	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Chrysene	218-01-9	130	J	18	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	360	1
04688	Fluoranthene	206-44-0	200		18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	32	J	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164632
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

05405 SDG#: DE038-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1
04688	Phenanthrene	85-01-8	75	J	18	180	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	Pyrene	129-00-0	230		18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5	J	6.4	19	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	1.6	J	0.66	1.8	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	81	U	81	270	1
10401	MCPP (Mecoprop)	93-65-2	80	U	80	270	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164632
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

05405 SDG#: DE038-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	1.3	U	1.3	3.6	1
01363	p,p-DDD	72-54-8	0.61	U	0.61	0.61	1
01363	p,p-DDE	72-55-9	0.37	U	0.37	0.37	1
01363	p,p-DDT	50-29-3	0.44	U	0.44	0.44	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.26	U	0.26	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070	U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.22	U	0.22	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.045	U	0.045	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.49	U	0.49	0.49	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	6.4		1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35	U	0.35	1.8	1
10225	PCB-1260	11096-82-5	1.5	J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,500		5.21	20.7	1
07914	Boron	7440-42-8	9.07		0.921	5.18	1
01650	Calcium	7440-70-2	7,360		6.34	20.7	1
01654	Iron	7439-89-6	22,500		4.88	20.7	1
01656	Lithium	7439-93-2	19.7		0.23	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164632
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

05405 SDG#: DE038-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,710		2.63	10.4	1
06958	Manganese	7439-96-5	303		0.0807	0.518	1
10145	Phosphorus	7723-14-0	495		0.580	10.4	1
01662	Potassium	7440-09-7	3,230		18.6	51.8	1
01667	Sodium	7440-23-5	138		38.6	104	1
07968	Strontium	7440-24-6	35.1		0.0642	0.518	1
06969	Tin	7440-31-5	2.78	J	1.04	10.4	1
06970	Titanium	7440-32-6	1,310		0.393	1.04	1
10146	Zirconium	7440-67-7	1.62	J	0.869	5.18	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.225		0.0633	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.00		0.0633	0.422	2
06126	Barium	7440-39-3	131		0.114	0.422	2
06127	Beryllium	7440-41-7	0.579		0.0169	0.106	2
06128	Cadmium	7440-43-9	0.227		0.0380	0.106	2
06131	Chromium	7440-47-3	24.1		0.127	0.422	2
06132	Cobalt	7440-48-4	5.80		0.0211	0.106	2
06133	Copper	7440-50-8	12.9		0.0697	0.422	2
06135	Lead	7439-92-1	7.07		0.0110	0.211	2
06138	Molybdenum	7439-98-7	0.674		0.0528	0.106	2
06139	Nickel	7440-02-0	13.8		0.106	0.422	2
06141	Selenium	7782-49-2	0.104	J	0.0422	0.422	2
06142	Silver	7440-22-4	0.0379	J	0.0127	0.106	2
06145	Thallium	7440-28-0	0.324		0.0317	0.106	2
06148	Vanadium	7440-62-2	42.7		0.0232	0.106	2
06149	Zinc	7440-66-6	81.9		0.591	3.17	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0220	J	0.0029	0.102	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	32.0	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.49	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	440		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164632
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

05405 SDG#: DE038-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.80	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 10:12	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 13:57	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 22:15	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/10/2011 23:49	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 23:31	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 07:43	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:41	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:23	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:41	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:33	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:33	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164632
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

05405 SDG#: DE038-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:07	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:23	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:46	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:46	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:46	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:46	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:44	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 06:02	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 17:54	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 18:09	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164633
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

10505 SDG#: DE038-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	170	U	170	520	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U	170	520	1
04688	Benzyl alcohol	100-51-6	170	U	170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U	17	170	1
04688	Carbazole	86-74-8	17	U	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	170	1
04688	4-Chloroaniline	106-47-8	70	U	70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U	17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U	17	170	1
04688	2-Chlorophenol	95-57-8	17	U	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	170	1
04688	Dibenzofuran	132-64-9	17	U	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U	100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U	17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U	170	520	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U	17	350	1
04688	Hexachlorobenzene	118-74-1	17	U	17	170	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U	170	520	1
04688	Hexachloroethane	67-72-1	17	U	17	170	1
04688	Isophorone	78-59-1	17	U	17	170	1
04688	2-Methylphenol	95-48-7	35	U	35	170	1
04688	4-Methylphenol	106-44-5	35	U	35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U	17	170	1
04688	3-Nitroaniline	99-09-2	35	U	35	170	1
04688	4-Nitroaniline	100-01-6	70	U	70	170	1
04688	Nitrobenzene	98-95-3	17	U	17	170	1
04688	2-Nitrophenol	88-75-5	17	U	17	170	1
04688	4-Nitrophenol	100-02-7	170	U	170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U	170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164633
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

10505 SDG#: DE038-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	17	U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	170	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.7	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.7	1
10138	Anthracene	120-12-7	0.89	J	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	0.70	U	0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	0.70	U	0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	1.5	J	0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	0.70	U	0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	0.70	U	0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	7.4	J	6.3	19	1
10138	Chrysene	218-01-9	1.1	J	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U	0.70	1.7	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluoranthene	206-44-0	0.70	U	0.70	1.7	1
10138	Fluorene	86-73-7	0.70	U	0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	U	0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.70	U	0.70	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.70	U	0.70	1.7	1
10138	Naphthalene	91-20-3	0.70	U	0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	0.70	U	0.70	1.7	1
10138	Pyrene	129-00-0	0.89	J	0.70	1.7	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.4	1
10401	2,4-DB	94-82-6	4.3		0.65	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8	1
10401	MCPA	94-74-6	290		79	260	1
10401	MCPP (Mecoprop)	93-65-2	96	U	96	260	1
10401	2,4,5-T	93-76-5	0.086	U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.078	U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164633
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

10505 SDG#: DE038-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.035	U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.063	U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035	U	0.035	0.17	1
01363	Chlordane	57-74-9	0.84	U	0.84	3.5	1
01363	p,p-DDD	72-54-8	0.18	U	0.18	0.35	1
01363	p,p-DDE	72-55-9	0.20	U	0.20	0.35	1
01363	p,p-DDT	50-29-3	0.24	U	0.24	0.35	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.11	U	0.11	0.35	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069	U	0.069	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.069	U	0.069	0.35	1
01363	Endrin	72-20-8	0.069	U	0.069	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.069	U	0.069	0.35	1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.35	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.094	U	0.094	0.17	1
01363	Methoxychlor	72-43-5	0.35	U	0.35	1.7	1
01363	Mirex	2385-85-5	0.069	U	0.069	0.35	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.1	U	2.1	6.9	2
10225	Aroclor 5442	12642-23-8	2.1	U	2.1	6.9	2
10225	Aroclor 5460	11126-42-4	4.6	J	2.1	6.9	2
10225	PCB-1016	12674-11-2	0.69	U	0.69	3.5	2
10225	PCB-1221	11104-28-2	1.0	U	1.0	3.5	2
10225	PCB-1232	11141-16-5	1.1	U	1.1	3.5	2
10225	PCB-1242	53469-21-9	1.0	U	1.0	3.5	2
10225	PCB-1248	12672-29-6	0.69	U	0.69	3.5	2
10225	PCB-1254	11097-69-1	30		0.69	3.5	2
10225	PCB-1260	11096-82-5	0.69	U	0.69	3.5	2
10225	PCB-1262	37324-23-5	0.69	U	0.69	3.5	2
10225	PCB-1268	11100-14-4	0.69	U	0.69	3.5	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Metals	**SW-846 6010B**	mg/kg	mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164633
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

10505 SDG#: DE038-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,500		5.20	20.7	1
07914	Boron	7440-42-8	8.56		0.920	5.17	1
01650	Calcium	7440-70-2	6,520		6.34	20.7	1
01654	Iron	7439-89-6	27,000		4.87	20.7	1
01656	Lithium	7439-93-2	18.1		0.23	2.1	1
01657	Magnesium	7439-95-4	5,240		2.63	10.3	1
06958	Manganese	7439-96-5	343		0.0806	0.517	1
10145	Phosphorus	7723-14-0	762		0.579	10.3	1
01662	Potassium	7440-09-7	3,870		18.6	51.7	1
01667	Sodium	7440-23-5	179		38.5	103	1
07968	Strontium	7440-24-6	30.0		0.0641	0.517	1
06969	Tin	7440-31-5	2.60	J	1.03	10.3	1
06970	Titanium	7440-32-6	1,340		0.393	1.03	1
10146	Zirconium	7440-67-7	0.868	U	0.868	5.17	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.144	J	0.0614	0.205	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.15		0.0614	0.409	2
06126	Barium	7440-39-3	140		0.111	0.409	2
06127	Beryllium	7440-41-7	0.427		0.0164	0.102	2
06128	Cadmium	7440-43-9	0.211		0.0368	0.102	2
06131	Chromium	7440-47-3	23.5		0.123	0.409	2
06132	Cobalt	7440-48-4	6.24		0.0205	0.102	2
06133	Copper	7440-50-8	16.5		0.0675	0.409	2
06135	Lead	7439-92-1	9.06		0.0106	0.205	2
06138	Molybdenum	7439-98-7	1.43		0.0512	0.102	2
06139	Nickel	7440-02-0	15.6		0.102	0.409	2
06141	Selenium	7782-49-2	0.0577	J	0.0409	0.409	2
06142	Silver	7440-22-4	0.0340	J	0.0123	0.102	2
06145	Thallium	7440-28-0	0.294		0.0307	0.102	2
06148	Vanadium	7440-62-2	43.3		0.0225	0.102	2
06149	Zinc	7440-66-6	96.1		0.573	3.07	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0207	J	0.0028	0.0979	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8		0.84	1.0	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4	U	9.4	31.3	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164633
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

10505 SDG#: DE038-10

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	421	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.81	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	4.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 10:46	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 14:29	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 22:43	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 00:04	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/23/2010 23:50	Lindsey K Lafferty	2
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 09:02	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:44	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/30/2010 10:37	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:27	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164633
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

10505 SDG#: DE038-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:44	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:37	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:37	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:11	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:27	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:49	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:49	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:49	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:49	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:46	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203A	01/11/2011 06:16	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202A	01/03/2011 18:18	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 18:25	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203A	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202A	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164634
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

09805 SDG#: DE038-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	170	U	170	520	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,400	1
04688	Benzoic acid	65-85-0	170	U	170	520	1
04688	Benzyl alcohol	100-51-6	170	U	170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U	17	170	1
04688	Carbazole	86-74-8	17	U	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	34	U	34	170	1
04688	4-Chloroaniline	106-47-8	69	U	69	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U	17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U	17	170	1
04688	2-Chlorophenol	95-57-8	17	U	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	34	U	34	170	1
04688	Dibenzofuran	132-64-9	17	U	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U	100	340	1
04688	2,4-Dichlorophenol	120-83-2	17	U	17	170	1
04688	2,4-Dimethylphenol	105-67-9	34	U	34	170	1
04688	3,5-Dimethylphenol	108-68-9	34	U	34	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U	170	520	1
04688	2,4-Dinitrophenol	51-28-5	690	U	690	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	34	U	34	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U	17	340	1
04688	Hexachlorobenzene	118-74-1	17	U	17	170	1
04688	Hexachlorobutadiene	87-68-3	69	U	69	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U	170	520	1
04688	Hexachloroethane	67-72-1	17	U	17	170	1
04688	Isophorone	78-59-1	17	U	17	170	1
04688	2-Methylphenol	95-48-7	34	U	34	170	1
04688	4-Methylphenol	106-44-5	34	U	34	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U	17	170	1
04688	3-Nitroaniline	99-09-2	34	U	34	170	1
04688	4-Nitroaniline	100-01-6	69	U	69	170	1
04688	Nitrobenzene	98-95-3	17	U	17	170	1
04688	2-Nitrophenol	88-75-5	17	U	17	170	1
04688	4-Nitrophenol	100-02-7	170	U	170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U	170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164634
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

09805 SDG#: DE038-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	17	U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	34	U	34	170	1
04688	2,4,6-Trichlorophenol	88-06-2	34	U	34	170	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.69	U	0.69	1.7	1
10138	Acenaphthylene	208-96-8	0.34	U	0.34	1.7	1
10138	Anthracene	120-12-7	0.34	U	0.34	1.7	1
10138	Benzo(a)anthracene	56-55-3	1.6	J	0.69	1.7	1
10138	Benzo(a)pyrene	50-32-8	1.7	J	0.69	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	2.7		0.69	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	1.1	J	0.69	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	1.2	J	0.69	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.2	U	6.2	19	1
10138	Di-n-butylphthalate	84-74-2	7.0	J	6.2	19	1
10138	Chrysene	218-01-9	2.2		0.34	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.69	U	0.69	1.7	1
10138	Diethylphthalate	84-66-2	6.2	U	6.2	19	1
10138	Dimethylphthalate	131-11-3	6.2	U	6.2	19	1
10138	Fluoranthene	206-44-0	2.7		0.69	1.7	1
10138	Fluorene	86-73-7	0.69	U	0.69	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.78	J	0.69	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.69	U	0.69	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.69	U	0.69	1.7	1
10138	Naphthalene	91-20-3	0.69	U	0.69	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.69	U	0.69	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.2	U	6.2	19	1
10138	Phenanthrene	85-01-8	0.99	J	0.69	1.7	1
10138	Pyrene	129-00-0	2.9		0.69	1.7	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.2	U	1.2	3.7	1
10401	Dalapon	75-99-0	4.5	U	4.5	9.3	1
10401	2,4-DB	94-82-6	2.5		0.64	1.8	1
10401	Dicamba	1918-00-9	0.41	U	0.41	1.2	1
10401	Dinoseb	88-85-7	0.83	U	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83	U	0.83	1.8	1
10401	MCPA	94-74-6	79	U	79	260	1
10401	MCPP (Mecoprop)	93-65-2	150	J	77	260	1
10401	2,4,5-T	93-76-5	0.085	U	0.085	0.18	1
10401	2,4,5-TP	93-72-1	0.077	U	0.077	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.2	U	2.2	5.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164634
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

09805 SDG#: DE038-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.068	U	0.068	0.17	1
01363	Alpha BHC	319-84-6	0.035	U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.062	U	0.062	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035	U	0.035	0.17	1
01363	Chlordane	57-74-9	0.83	U	0.83	3.5	1
01363	p,p-DDD	72-54-8	0.068	U	0.068	0.35	1
01363	p,p-DDE	72-55-9	0.068	U	0.068	0.35	1
01363	p,p-DDT	50-29-3	0.068	U	0.068	0.35	1
01363	Delta BHC	319-86-8	0.037	U	0.037	0.17	1
01363	Dieldrin	60-57-1	0.068	U	0.068	0.35	1
01363	Endosulfan I	959-98-8	0.045	U	0.045	0.17	1
01363	Endosulfan II	33213-65-9	0.068	U	0.068	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.068	U	0.068	0.35	1
01363	Endrin	72-20-8	0.068	U	0.068	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.068	U	0.068	0.35	1
01363	Endrin Ketone	53494-70-5	0.068	U	0.068	0.35	1
01363	Heptachlor	76-44-8	0.062	U	0.062	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.035	U	0.035	0.17	1
01363	Methoxychlor	72-43-5	0.35	U	0.35	1.7	1
01363	Mirex	2385-85-5	0.068	U	0.068	0.35	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.8	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	10	U	10	34	10
10225	Aroclor 5442	12642-23-8	10	U	10	34	10
10225	Aroclor 5460	11126-42-4	10	U	10	34	10
10225	PCB-1016	12674-11-2	3.4	U	3.4	18	10
10225	PCB-1221	11104-28-2	5.2	U	5.2	18	10
10225	PCB-1232	11141-16-5	5.4	U	5.4	18	10
10225	PCB-1242	53469-21-9	5.2	U	5.2	18	10
10225	PCB-1248	12672-29-6	3.4	U	3.4	18	10
10225	PCB-1254	11097-69-1	4.9	J	3.4	18	10
10225	PCB-1260	11096-82-5	3.4	U	3.4	18	10
10225	PCB-1262	37324-23-5	3.4	U	3.4	18	10
10225	PCB-1268	11100-14-4	3.4	U	3.4	18	10

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.
Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.

Metals	**SW-846 6010B**	**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,300	5.14	20.5	1
07914	Boron	7440-42-8	8.72	0.910	5.11	1
01650	Calcium	7440-70-2	7,920	6.27	20.5	1
01654	Iron	7439-89-6	22,800	4.82	20.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164634
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

09805 SDG#: DE038-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	18.4		0.23	2.0	1
01657	Magnesium	7439-95-4	5,590		2.60	10.2	1
06958	Manganese	7439-96-5	312		0.0798	0.511	1
10145	Phosphorus	7723-14-0	634		0.573	10.2	1
01662	Potassium	7440-09-7	4,600		18.4	51.1	1
01667	Sodium	7440-23-5	180		38.2	102	1
07968	Strontium	7440-24-6	26.7		0.0634	0.511	1
06969	Tin	7440-31-5	2.25	J	1.02	10.2	1
06970	Titanium	7440-32-6	1,590		0.389	1.02	1
10146	Zirconium	7440-67-7	1.40	J	0.859	5.11	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.126	J	0.0608	0.203	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	3.81		0.0608	0.405	2
06126	Barium	7440-39-3	127		0.109	0.405	2
06127	Beryllium	7440-41-7	0.365		0.0162	0.101	2
06128	Cadmium	7440-43-9	0.176		0.0365	0.101	2
06131	Chromium	7440-47-3	18.8		0.122	0.405	2
06132	Cobalt	7440-48-4	7.01		0.0203	0.101	2
06133	Copper	7440-50-8	13.1		0.0668	0.405	2
06135	Lead	7439-92-1	7.00		0.0105	0.203	2
06138	Molybdenum	7439-98-7	0.472		0.0506	0.101	2
06139	Nickel	7440-02-0	10.6		0.101	0.405	2
06141	Selenium	7782-49-2	0.0689	J	0.0405	0.405	2
06142	Silver	7440-22-4	0.0257	J	0.0122	0.101	2
06145	Thallium	7440-28-0	0.244		0.0304	0.101	2
06148	Vanadium	7440-62-2	45.6		0.0223	0.101	2
06149	Zinc	7440-66-6	71.9		0.567	3.04	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0248	J	0.0029	0.101	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4		0.83	1.0	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.3	U	9.3	31.0	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.0	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	405		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164634
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

09805 SDG#: DE038-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.71	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	3.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 11:21	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 15:01	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 23:10	John W Perkins	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103500020A	12/21/2010 17:57	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 00:18	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 09:39	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103500020A	12/17/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 06:57	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164634
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

09805 SDG#: DE038-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:41	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 06:57	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:52	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:52	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:15	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:41	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:52	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:52	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:52	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:52	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:47	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 06:30	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 18:42	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 18:41	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164635
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14205 SDG#: DE038-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	360	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164635
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14205 SDG#: DE038-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8	1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.71	U	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.71	U	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.71	U	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.71	U	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.71	U	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19	1
10138	Chrysene	218-01-9	0.41	J	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluoranthene	206-44-0	0.71	U	0.71	1.8	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
10138	Phenanthrene	85-01-8	0.71	U	0.71	1.8	1
10138	Pyrene	129-00-0	0.71	U	0.71	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	1.1	J	0.66	1.8	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	81	U	81	270	1
10401	MCPP (Mecoprop)	93-65-2	91	J	80	270	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164635
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14205 SDG#: DE038-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070	U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.36	J	0.070	0.36	1
01363	p,p-DDT	50-29-3	0.13	J	0.070	0.36	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070	U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.15	J	0.036	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1

The LCS recoveries for various compounds are outside the QC limits.
Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35	U	0.35	1.8	1
10225	PCB-1260	11096-82-5	0.35	U	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,300	5.26	20.9	1
07914	Boron	7440-42-8	7.44	0.930	5.23	1
01650	Calcium	7440-70-2	3,390	6.41	20.9	1
01654	Iron	7439-89-6	24,400	4.92	20.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164635
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14205 SDG#: DE038-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	27.2		0.23	2.1	1
01657	Magnesium	7439-95-4	5,400		2.65	10.5	1
06958	Manganese	7439-96-5	339		0.0815	0.523	1
10145	Phosphorus	7723-14-0	487		0.585	10.5	1
01662	Potassium	7440-09-7	2,650		18.8	52.3	1
01667	Sodium	7440-23-5	77.6	J	39.0	105	1
07968	Strontium	7440-24-6	18.9		0.0648	0.523	1
06969	Tin	7440-31-5	3.07	J	1.05	10.5	1
06970	Titanium	7440-32-6	1,380		0.397	1.05	1
10146	Zirconium	7440-67-7	1.88	J	0.878	5.23	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.125	J	0.0633	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.72		0.0633	0.422	2
06126	Barium	7440-39-3	116		0.114	0.422	2
06127	Beryllium	7440-41-7	0.664		0.0169	0.106	2
06128	Cadmium	7440-43-9	0.120		0.0380	0.106	2
06131	Chromium	7440-47-3	24.4		0.127	0.422	2
06132	Cobalt	7440-48-4	6.99		0.0211	0.106	2
06133	Copper	7440-50-8	9.29		0.0697	0.422	2
06135	Lead	7439-92-1	6.58		0.0110	0.211	2
06138	Molybdenum	7439-98-7	0.518		0.0528	0.106	2
06139	Nickel	7440-02-0	13.9		0.106	0.422	2
06141	Selenium	7782-49-2	0.144	J	0.0422	0.422	2
06142	Silver	7440-22-4	0.0225	J	0.0127	0.106	2
06145	Thallium	7440-28-0	0.289		0.0317	0.106	2
06148	Vanadium	7440-62-2	46.6		0.0232	0.106	2
06149	Zinc	7440-66-6	61.6		0.591	3.17	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0042	J	0.0029	0.102	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	32.0	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	418		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164635
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14205 SDG#: DE038-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.67	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 11:56	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 15:33	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/28/2010 23:38	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 00:32	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 09:58	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:01	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:45	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:01	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164635
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14205 SDG#: DE038-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 10:56	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 10:56	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:19	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:45	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:55	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:55	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:55	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:55	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:48	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 07:13	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 20:19	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 18:57	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164636
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14305 SDG#: DE038-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	170	U	170	520	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U	170	520	1
04688	Benzyl alcohol	100-51-6	170	U	170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U	17	170	1
04688	Carbazole	86-74-8	17	U	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	170	1
04688	4-Chloroaniline	106-47-8	69	U	69	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U	17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U	17	170	1
04688	2-Chlorophenol	95-57-8	17	U	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	170	1
04688	Dibenzofuran	132-64-9	17	U	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U	100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U	17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U	170	520	1
04688	2,4-Dinitrophenol	51-28-5	690	U	690	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U	17	350	1
04688	Hexachlorobenzene	118-74-1	17	U	17	170	1
04688	Hexachlorobutadiene	87-68-3	69	U	69	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U	170	520	1
04688	Hexachloroethane	67-72-1	17	U	17	170	1
04688	Isophorone	78-59-1	17	U	17	170	1
04688	2-Methylphenol	95-48-7	35	U	35	170	1
04688	4-Methylphenol	106-44-5	35	U	35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U	17	170	1
04688	3-Nitroaniline	99-09-2	35	U	35	170	1
04688	4-Nitroaniline	100-01-6	69	U	69	170	1
04688	Nitrobenzene	98-95-3	17	U	17	170	1
04688	2-Nitrophenol	88-75-5	17	U	17	170	1
04688	4-Nitrophenol	100-02-7	170	U	170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U	170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164636
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14305 SDG#: DE038-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	17	U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	170	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.69	U	0.69	1.7	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.7	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	0.69	U	0.69	1.7	1
10138	Benzo(a)pyrene	50-32-8	0.69	U	0.69	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	0.69	U	0.69	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	0.69	U	0.69	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	0.69	U	0.69	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.2	U	6.2	19	1
10138	Di-n-butylphthalate	84-74-2	6.2	U	6.2	19	1
10138	Chrysene	218-01-9	0.57	J	0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.69	U	0.69	1.7	1
10138	Diethylphthalate	84-66-2	6.2	U	6.2	19	1
10138	Dimethylphthalate	131-11-3	6.2	U	6.2	19	1
10138	Fluoranthene	206-44-0	1.1	J	0.69	1.7	1
10138	Fluorene	86-73-7	0.69	U	0.69	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.69	U	0.69	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.69	U	0.69	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.69	U	0.69	1.7	1
10138	Naphthalene	91-20-3	0.69	U	0.69	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.69	U	0.69	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.2	U	6.2	19	1
10138	Phenanthrene	85-01-8	0.69	U	0.69	1.7	1
10138	Pyrene	129-00-0	0.88	J	0.69	1.7	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.2	U	1.2	3.7	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.3	1
10401	2,4-DB	94-82-6	3.7	U	3.7	3.7	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.2	1
10401	Dinoseb	88-85-7	0.83	U	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83	U	0.83	1.8	1
10401	MCPA	94-74-6	79	U	79	260	1
10401	MCPP (Mecoprop)	93-65-2	370		78	260	1
10401	2,4,5-T	93-76-5	0.085	U	0.085	0.18	1
10401	2,4,5-TP	93-72-1	0.078	U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164636
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14305 SDG#: DE038-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.035	U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.062	U	0.062	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035	U	0.035	0.17	1
01363	Chlordane	57-74-9	0.83	U	0.83	3.5	1
01363	p,p-DDD	72-54-8	0.069	U	0.069	0.35	1
01363	p,p-DDE	72-55-9	0.069	U	0.069	0.35	1
01363	p,p-DDT	50-29-3	0.069	U	0.069	0.35	1
01363	Delta BHC	319-86-8	0.037	U	0.037	0.17	1
01363	Dieldrin	60-57-1	0.069	U	0.069	0.35	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.10	U	0.10	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.069	U	0.069	0.35	1
01363	Endrin	72-20-8	0.069	U	0.069	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.16	U	0.16	0.35	1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.35	1
01363	Heptachlor	76-44-8	0.062	U	0.062	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.044	U	0.044	0.17	1
01363	Methoxychlor	72-43-5	0.35	U	0.35	1.7	1
01363	Mirex	2385-85-5	0.21	U	0.21	0.35	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.1	J	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34	U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52	U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54	U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52	U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34	U	0.34	1.8	1
10225	PCB-1254	11097-69-1	0.67	J	0.34	1.8	1
10225	PCB-1260	11096-82-5	0.51	J	0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34	U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34	U	0.34	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Metals	**SW-846 6010B**		mg/kg		mg/kg	mg/kg	

*=This limit was used in the evaluation of the final result

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164636
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14305 SDG#: DE038-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,700		5.17	20.6	1
07914	Boron	7440-42-8	8.39		0.915	5.14	1
01650	Calcium	7440-70-2	2,770		6.30	20.6	1
01654	Iron	7439-89-6	22,900		4.84	20.6	1
01656	Lithium	7439-93-2	23.8		0.23	2.1	1
01657	Magnesium	7439-95-4	4,560		2.61	10.3	1
06958	Manganese	7439-96-5	306		0.0802	0.514	1
10145	Phosphorus	7723-14-0	778		0.576	10.3	1
01662	Potassium	7440-09-7	3,870		18.5	51.4	1
01667	Sodium	7440-23-5	70.1	J	38.3	103	1
07968	Strontium	7440-24-6	17.0		0.0637	0.514	1
06969	Tin	7440-31-5	2.62	J	1.03	10.3	1
06970	Titanium	7440-32-6	1,270		0.391	1.03	1
10146	Zirconium	7440-67-7	1.72	J	0.864	5.14	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0659	J	0.0617	0.206	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.52		0.0617	0.411	2
06126	Barium	7440-39-3	90.8		0.111	0.411	2
06127	Beryllium	7440-41-7	0.620		0.0165	0.103	2
06128	Cadmium	7440-43-9	0.0929	J	0.0370	0.103	2
06131	Chromium	7440-47-3	20.1		0.123	0.411	2
06132	Cobalt	7440-48-4	5.26		0.0206	0.103	2
06133	Copper	7440-50-8	9.59		0.0679	0.411	2
06135	Lead	7439-92-1	5.37		0.0107	0.206	2
06138	Molybdenum	7439-98-7	0.558		0.0514	0.103	2
06139	Nickel	7440-02-0	12.2		0.103	0.411	2
06141	Selenium	7782-49-2	0.112	J	0.0411	0.411	2
06142	Silver	7440-22-4	0.0330	J	0.0123	0.103	2
06145	Thallium	7440-28-0	0.200		0.0308	0.103	2
06148	Vanadium	7440-62-2	36.0		0.0226	0.103	2
06149	Zinc	7440-66-6	57.2		0.576	3.08	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0029	U	0.0029	0.100	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6		0.83	1.0	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.3	U	9.3	31.2	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.0	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164636
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14305 SDG#: DE038-13

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	436	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.15	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	3.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 12:30	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 16:05	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/29/2010 00:05	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 00:46	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/24/2010 00:45	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 10:16	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:04	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:49	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164636
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14305 SDG#: DE038-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:04	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:00	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:00	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:30	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:49	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 13:58	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 13:58	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 13:58	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 13:58	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:49	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 07:56	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 20:43	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 19:29	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102A	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402A	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12305 SDG#: DE038-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Butylbenzylphthalate	85-68-7	21	J	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	89	J	18	350	1
04688	Fluoranthene	206-44-0	33	J	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12305 SDG#: DE038-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1
04688	Phenanthrene	85-01-8	22	J	18	180	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	Pyrene	129-00-0	30	J	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	1.0	J	0.35	1.8	1
10138	Anthracene	120-12-7	3.1		0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	11		0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	9.4		0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	18		0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	4.5		0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	7.9		0.71	1.8	1
10138	Di-n-butylphthalate	84-74-2	12	J	6.4	19	1
10138	Chrysene	218-01-9	22		0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.1	J	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluorene	86-73-7	1.2	J	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.0		0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	3.2		0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	3.6		0.71	1.8	1
10138	Naphthalene	91-20-3	2.3		0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	4.7	U	4.7	4.7	1
10401	Dicamba	1918-00-9	0.51	J	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	81	U	81	270	1
10401	MCPP (Mecoprop)	93-65-2	240	J	80	270	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12305 SDG#: DE038-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.46		0.036	0.18	1
01363	Beta BHC	319-85-7	0.097	U	0.097	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070	U	0.070	0.36	1
01363	p,p-DDE	72-55-9	3.2		0.35	1.8	5
01363	p,p-DDT	50-29-3	4.2		0.35	1.8	5
01363	Delta BHC	319-86-8	0.12	J	0.038	0.18	1
01363	Dieldrin	60-57-1	1.2	U	1.2	1.2	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	2.2		0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.27		0.036	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.45		0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1
	The LCS recoveries for various compounds are outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts. Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram, the values reported dieldrin represent the lowest reporting limits attainable. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: beta-BHC. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12305 SDG#: DE038-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	PCB-1254	11097-69-1	0.35	U	0.35	1.8	1
10225	PCB-1260	11096-82-5	0.35	U	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,200		5.15	20.5	1
07914	Boron	7440-42-8	8.17		0.911	5.12	1
01650	Calcium	7440-70-2	2,760		6.28	20.5	1
01654	Iron	7439-89-6	19,600		4.82	20.5	1
01656	Lithium	7439-93-2	20.3		0.23	2.0	1
01657	Magnesium	7439-95-4	4,130		2.60	10.2	1
06958	Manganese	7439-96-5	275		0.0799	0.512	1
10145	Phosphorus	7723-14-0	449		0.573	10.2	1
01662	Potassium	7440-09-7	2,780		18.4	51.2	1
01667	Sodium	7440-23-5	75.6	J	38.2	102	1
07968	Strontium	7440-24-6	18.6		0.0635	0.512	1
06969	Tin	7440-31-5	2.76	J	1.02	10.2	1
06970	Titanium	7440-32-6	1,130		0.389	1.02	1
10146	Zirconium	7440-67-7	1.69	J	0.860	5.12	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.353		0.0626	0.209	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.41		0.0626	0.418	2
06126	Barium	7440-39-3	114		0.113	0.418	2
06127	Beryllium	7440-41-7	0.618		0.0167	0.104	2
06128	Cadmium	7440-43-9	0.280		0.0376	0.104	2
06131	Chromium	7440-47-3	26.2		0.125	0.418	2
06132	Cobalt	7440-48-4	7.37		0.0209	0.104	2
06133	Copper	7440-50-8	13.4		0.0689	0.418	2
06135	Lead	7439-92-1	44.4		0.0109	0.209	2
06138	Molybdenum	7439-98-7	1.06		0.0522	0.104	2
06139	Nickel	7440-02-0	16.2		0.104	0.418	2
06141	Selenium	7782-49-2	0.209	J	0.0418	0.418	2
06142	Silver	7440-22-4	0.0993	J	0.0125	0.104	2
06145	Thallium	7440-28-0	0.186		0.0313	0.104	2
06148	Vanadium	7440-62-2	42.4		0.0230	0.104	2
06149	Zinc	7440-66-6	105		0.585	3.13	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0225	J	0.0029	0.0995	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6		0.85	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12305 SDG#: DE038-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 314.0**		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	31.9	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.66	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.	n.a.	449		10.0	10.0	1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.40		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3 "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.	n.a.	6.1		0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 13:05	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 16:37	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/29/2010 00:33	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 01:00	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/16/2011 21:43	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 10:35	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12305 SDG#: DE038-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:08	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:53	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:08	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:04	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:04	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:34	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:53	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:08	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/31/2010 06:58	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:08	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:08	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/31/2010 06:58	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 14:08	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:50	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 08:10	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 21:07	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10363243202A	01/02/2011 19:53	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164637
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12305 SDG#: DE038-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12405 SDG#: DE038-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	70	U	70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	70	U	70	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12405 SDG#: DE038-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.70	U	0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.70	U	0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.70	U	0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.70	U	0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.70	U	0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19	1
10138	Chrysene	218-01-9	0.82	J	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluoranthene	206-44-0	1.1	J	0.70	1.8	1
10138	Fluorene	86-73-7	0.70	U	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	U	0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.70	U	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.70	U	0.70	1.8	1
10138	Naphthalene	91-20-3	0.70	U	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	0.77	J	0.70	1.8	1
10138	Pyrene	129-00-0	1.2	J	0.70	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5	1
10401	2,4-DB	94-82-6	0.65	U	0.65	1.8	1
10401	Dicamba	1918-00-9	0.52	U	0.52	1.3	1
10401	Dinoseb	88-85-7	1.5	U	1.5	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	47		0.84	1.8	1
10401	MCPA	94-74-6	80	U	80	260	1
10401	MCPP (Mecoprop)	93-65-2	200	U	200	260	1
10401	2,4,5-T	93-76-5	0.086	U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12405 SDG#: DE038-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.						
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.063	U	0.063	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.84	U	0.84	3.6	1
01363	p,p-DDD	72-54-8	1.5	U	1.5	1.5	1
01363	p,p-DDE	72-55-9	0.55	U	0.55	0.55	1
01363	p,p-DDT	50-29-3	1.7	U	1.7	1.7	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.35	U	0.35	0.36	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070	U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.093	U	0.093	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	4.8		1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	10		0.35	1.8	1
10225	PCB-1260	11096-82-5	3.5		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12405 SDG#: DE038-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		**SW-846 6010B**	**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,600		5.15	20.5	1
07914	Boron	7440-42-8	9.25		0.911	5.12	1
01650	Calcium	7440-70-2	3,280		6.28	20.5	1
01654	Iron	7439-89-6	25,900		4.82	20.5	1
01656	Lithium	7439-93-2	25.3		0.23	2.0	1
01657	Magnesium	7439-95-4	5,200		2.60	10.2	1
06958	Manganese	7439-96-5	375		0.0799	0.512	1
10145	Phosphorus	7723-14-0	584		0.574	10.2	1
01662	Potassium	7440-09-7	4,950		18.4	51.2	1
01667	Sodium	7440-23-5	83.6	J	38.2	102	1
07968	Strontium	7440-24-6	22.7		0.0635	0.512	1
06969	Tin	7440-31-5	3.05	J	1.02	10.2	1
06970	Titanium	7440-32-6	1,470		0.389	1.02	1
10146	Zirconium	7440-67-7	2.30	J	0.860	5.12	1
		SW-846 6020	**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.238		0.0627	0.209	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.25		0.0627	0.418	2
06126	Barium	7440-39-3	176		0.113	0.418	2
06127	Beryllium	7440-41-7	0.841		0.0167	0.104	2
06128	Cadmium	7440-43-9	0.359		0.0376	0.104	2
06131	Chromium	7440-47-3	32.2		0.125	0.418	2
06132	Cobalt	7440-48-4	8.02		0.0209	0.104	2
06133	Copper	7440-50-8	16.9		0.0689	0.418	2
06135	Lead	7439-92-1	17.7		0.0109	0.209	2
06138	Molybdenum	7439-98-7	0.937		0.0522	0.104	2
06139	Nickel	7440-02-0	18.6		0.104	0.418	2
06141	Selenium	7782-49-2	0.181	J	0.0418	0.418	2
06142	Silver	7440-22-4	0.0973	J	0.0125	0.104	2
06145	Thallium	7440-28-0	0.348		0.0313	0.104	2
06148	Vanadium	7440-62-2	55.1		0.0230	0.104	2
06149	Zinc	7440-66-6	100		0.585	3.13	2
		SW-846 7471A	**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0143	J	0.0030	0.105	1
Wet Chemistry		**EPA 300.0**	**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.2		0.84	1.1	1
		EPA 314.0	**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.6	1
		SW-846 7199	**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12405 SDG#: DE038-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.59	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	478		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.79		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	5.2		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 13:40	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 17:09	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/29/2010 01:55	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 01:15	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/24/2010 02:37	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 10:53	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12405 SDG#: DE038-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:11	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 09:57	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:11	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:08	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:08	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:38	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 09:57	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:11	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/31/2010 07:00	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:11	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:11	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 14:11	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:54	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 08:24	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 21:31	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	10363243202A	01/02/2011 20:09	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164638
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

12405 SDG#: DE038-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164639
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

30905 SDG#: DE038-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	170	U	170	520	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzo(a)anthracene	56-55-3	20	J	17	170	1
04688	Benzo(a)pyrene	50-32-8	18	J	17	170	1
04688	Benzo(b)fluoranthene	205-99-2	17	J	17	170	1
04688	Benzoic acid	65-85-0	170	U	170	520	1
04688	Benzyl alcohol	100-51-6	170	U	170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U	17	170	1
04688	Carbazole	86-74-8	17	U	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	170	1
04688	4-Chloroaniline	106-47-8	69	U	69	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U	17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U	17	170	1
04688	2-Chlorophenol	95-57-8	17	U	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	170	1
04688	Dibenzofuran	132-64-9	17	U	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U	100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U	17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U	170	520	1
04688	2,4-Dinitrophenol	51-28-5	690	U	690	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	17	U	17	350	1
04688	Fluoranthene	206-44-0	18	J	17	170	1
04688	Hexachlorobenzene	118-74-1	17	U	17	170	1
04688	Hexachlorobutadiene	87-68-3	69	U	69	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U	170	520	1
04688	Hexachloroethane	67-72-1	17	U	17	170	1
04688	Isophorone	78-59-1	17	U	17	170	1
04688	2-Methylphenol	95-48-7	35	U	35	170	1
04688	4-Methylphenol	106-44-5	35	U	35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U	17	170	1
04688	3-Nitroaniline	99-09-2	35	U	35	170	1
04688	4-Nitroaniline	100-01-6	69	U	69	170	1
04688	Nitrobenzene	98-95-3	17	U	17	170	1
04688	2-Nitrophenol	88-75-5	17	U	17	170	1
04688	4-Nitrophenol	100-02-7	170	U	170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U	17	170	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164639
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

30905 SDG#: DE038-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U	170	520	1
04688	Phenol	108-95-2	17	U	17	170	1
04688	Pyrene	129-00-0	23	J	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	170	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.69	U	0.69	1.7	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.7	1
10138	Anthracene	120-12-7	0.52	J	0.35	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	1.9		0.69	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	5.5		0.69	1.7	1
10138	Butylbenzylphthalate	85-68-7	7.6	J	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	7.5	J	6.3	19	1
10138	Chrysene	218-01-9	9.4		0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.69	U	0.69	1.7	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluorene	86-73-7	0.69	U	0.69	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	2.8		0.69	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.69	U	0.69	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.69	U	0.69	1.7	1
10138	Naphthalene	91-20-3	0.69	U	0.69	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.69	U	0.69	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	0.69	U	0.69	1.7	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.4	1
10401	2,4-DB	94-82-6	0.70	J	0.65	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.83	U	0.83	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.83	U	0.83	1.8	1
10401	MCPA	94-74-6	79	U	79	260	1
10401	MCPP (Mecoprop)	93-65-2	78	U	78	260	1
10401	2,4,5-T	93-76-5	0.085	U	0.085	0.18	1
10401	2,4,5-TP	93-72-1	0.078	U	0.078	0.18	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.035	U	0.035	0.17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164639
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

30905 SDG#: DE038-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Beta BHC	319-85-7	0.063	U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035	U	0.035	0.17	1
01363	Chlordane	57-74-9	0.83	U	0.83	3.5	1
01363	p,p-DDD	72-54-8	0.069	U	0.069	0.35	1
01363	p,p-DDE	72-55-9	0.069	U	0.069	0.35	1
01363	p,p-DDT	50-29-3	0.069	U	0.069	0.35	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.069	U	0.069	0.35	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069	U	0.069	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.069	U	0.069	0.35	1
01363	Endrin	72-20-8	0.069	U	0.069	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.11	U	0.11	0.35	1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.35	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.035	U	0.035	0.17	1
01363	Methoxychlor	72-43-5	0.35	U	0.35	1.7	1
01363	Mirex	2385-85-5	0.094	U	0.094	0.35	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.0	U	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34	U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52	U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54	U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52	U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34	U	0.34	1.8	1
10225	PCB-1254	11097-69-1	0.34	U	0.34	1.8	1
10225	PCB-1260	11096-82-5	0.86	J	0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34	U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34	U	0.34	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,800	5.19	20.6	1
07914	Boron	7440-42-8	9.14	0.918	5.16	1
01650	Calcium	7440-70-2	3,950	6.32	20.6	1
01654	Iron	7439-89-6	18,000	4.86	20.6	1
01656	Lithium	7439-93-2	19.1	0.23	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164639
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

30905 SDG#: DE038-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,380		2.62	10.3	1
06958	Manganese	7439-96-5	254		0.0804	0.516	1
10145	Phosphorus	7723-14-0	417		0.578	10.3	1
01662	Potassium	7440-09-7	2,790		18.6	51.6	1
01667	Sodium	7440-23-5	483		38.5	103	1
07968	Strontium	7440-24-6	19.2		0.0639	0.516	1
06969	Tin	7440-31-5	2.40	J	1.03	10.3	1
06970	Titanium	7440-32-6	1,160		0.392	1.03	1
10146	Zirconium	7440-67-7	1.25	J	0.866	5.16	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.318		0.0601	0.200	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.83		0.0601	0.401	2
06126	Barium	7440-39-3	98.2		0.108	0.401	2
06127	Beryllium	7440-41-7	0.404		0.0160	0.100	2
06128	Cadmium	7440-43-9	0.114		0.0361	0.100	2
06131	Chromium	7440-47-3	17.9		0.120	0.401	2
06132	Cobalt	7440-48-4	5.45		0.0200	0.100	2
06133	Copper	7440-50-8	11.0		0.0661	0.401	2
06135	Lead	7439-92-1	5.25		0.0104	0.200	2
06138	Molybdenum	7439-98-7	0.734		0.0501	0.100	2
06139	Nickel	7440-02-0	9.84		0.100	0.401	2
06141	Selenium	7782-49-2	0.135	J	0.0401	0.401	2
06142	Silver	7440-22-4	0.0146	J	0.0120	0.100	2
06145	Thallium	7440-28-0	0.256		0.0300	0.100	2
06148	Vanadium	7440-62-2	35.5		0.0220	0.100	2
06149	Zinc	7440-66-6	73.9		0.561	3.00	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0061	J	0.0028	0.0985	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.4		0.83	1.0	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4	U	9.4	31.3	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.0	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	438		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164639
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

30905 SDG#: DE038-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.79	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	4.0	0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 14:15	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/04/2011 17:41	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	01/07/2011 09:33	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 02:54	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 11:12	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:14	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 10:01	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:14	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:12	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:12	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164639
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

30905 SDG#: DE038-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:41	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 10:01	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:14	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:14	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:14	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 14:14	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:55	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 08:38	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 21:55	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 20:17	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164640
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31105 SDG#: DE038-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	72	U	72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U	720	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	360	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U	72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	72	U	72	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	540	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164640
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31105 SDG#: DE038-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	4.9	J	3.6	9.0	5
10138	Acenaphthylene	208-96-8	1.8	U	1.8	9.0	5
10138	Anthracene	120-12-7	1.8	U	1.8	9.0	5
10138	Benzo(a)anthracene	56-55-3	3.6	U	3.6	9.0	5
10138	Benzo(a)pyrene	50-32-8	3.6	U	3.6	9.0	5
10138	Benzo(b)fluoranthene	205-99-2	3.6	U	3.6	9.0	5
10138	Benzo(g,h,i)perylene	191-24-2	3.6	U	3.6	9.0	5
10138	Benzo(k)fluoranthene	207-08-9	3.6	U	3.6	9.0	5
10138	Butylbenzylphthalate	85-68-7	33	U	33	98	5
10138	Di-n-butylphthalate	84-74-2	33	U	33	98	5
10138	Chrysene	218-01-9	1.8	U	1.8	9.0	5
10138	Dibenz(a,h)anthracene	53-70-3	3.6	U	3.6	9.0	5
10138	Diethylphthalate	84-66-2	33	U	33	98	5
10138	Dimethylphthalate	131-11-3	120		33	98	5
10138	Fluoranthene	206-44-0	3.6	U	3.6	9.0	5
10138	Fluorene	86-73-7	3.6	U	3.6	9.0	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.6	U	3.6	9.0	5
10138	1-Methylnaphthalene	90-12-0	6.2	J	3.6	9.0	5
10138	2-Methylnaphthalene	91-57-6	9.8		3.6	9.0	5
10138	Naphthalene	91-20-3	170		3.6	9.0	5
10138	N-Nitrosodimethylamine	62-75-9	3.6	U	3.6	9.0	5
10138	Di-n-octylphthalate	117-84-0	33	U	33	98	5
10138	Phenanthrene	85-01-8	3.6	U	3.6	9.0	5
10138	Pyrene	129-00-0	3.6	U	3.6	9.0	5
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U	4.8	9.8	1
10401	2,4-DB	94-82-6	6.5		0.67	1.8	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.87	U	0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87	U	0.87	1.8	1
10401	MCPA	94-74-6	150	U	150	270	1
10401	MCPP (Mecoprop)	93-65-2	81	U	81	270	1
10401	2,4,5-T	93-76-5	0.089	U	0.089	0.18	1
10401	2,4,5-TP	93-72-1	0.081	U	0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164640
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31105 SDG#: DE038-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	attained.						
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.072	U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.037	U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.065	U	0.065	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037	U	0.037	0.18	1
01363	Chlordane	57-74-9	1.2	U	1.2	3.7	1
01363	p,p-DDD	72-54-8	0.30	U	0.30	0.37	1
01363	p,p-DDE	72-55-9	0.072	U	0.072	0.37	1
01363	p,p-DDT	50-29-3	0.25	U	0.25	0.37	1
01363	Delta BHC	319-86-8	0.039	U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.085	U	0.085	0.37	1
01363	Endosulfan I	959-98-8	0.048	U	0.048	0.18	1
01363	Endosulfan II	33213-65-9	0.072	U	0.072	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.072	U	0.072	0.37	1
01363	Endrin	72-20-8	0.072	U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.072	U	0.072	0.37	1
01363	Endrin Ketone	53494-70-5	0.072	U	0.072	0.37	1
01363	Heptachlor	76-44-8	0.065	U	0.065	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.037	U	0.037	0.18	1
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8	1
01363	Mirex	2385-85-5	0.44	U	0.44	0.44	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.2	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	3.6		1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.8	1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.56	U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.8	1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.8	1
10225	PCB-1254	11097-69-1	3.9		0.36	1.8	1
10225	PCB-1260	11096-82-5	3.9		0.36	1.8	1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.8	1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164640
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31105 SDG#: DE038-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,200		5.40	21.5	1
07914	Boron	7440-42-8	9.87		0.955	5.36	1
01650	Calcium	7440-70-2	6,910		6.58	21.5	1
01654	Iron	7439-89-6	17,800		5.05	21.5	1
01656	Lithium	7439-93-2	15.1		0.24	2.1	1
01657	Magnesium	7439-95-4	3,850		2.72	10.7	1
06958	Manganese	7439-96-5	320		0.0837	0.536	1
10145	Phosphorus	7723-14-0	503		0.601	10.7	1
01662	Potassium	7440-09-7	2,510		19.3	53.6	1
01667	Sodium	7440-23-5	389		40.0	107	1
07968	Strontium	7440-24-6	57.0		0.0665	0.536	1
06969	Tin	7440-31-5	1.88	J	1.07	10.7	1
06970	Titanium	7440-32-6	997		0.408	1.07	1
10146	Zirconium	7440-67-7	3.31	J	0.901	5.36	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.251		0.0631	0.210	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.91		0.0631	0.421	2
06126	Barium	7440-39-3	100		0.114	0.421	2
06127	Beryllium	7440-41-7	0.400		0.0168	0.105	2
06128	Cadmium	7440-43-9	0.307		0.0379	0.105	2
06131	Chromium	7440-47-3	29.7		0.126	0.421	2
06132	Cobalt	7440-48-4	5.35		0.0210	0.105	2
06133	Copper	7440-50-8	13.5		0.0694	0.421	2
06135	Lead	7439-92-1	8.67		0.0109	0.210	2
06138	Molybdenum	7439-98-7	1.16		0.0526	0.105	2
06139	Nickel	7440-02-0	13.8		0.105	0.421	2
06141	Selenium	7782-49-2	0.232	J	0.0421	0.421	2
06142	Silver	7440-22-4	0.103	J	0.0126	0.105	2
06145	Thallium	7440-28-0	0.198		0.0316	0.105	2
06148	Vanadium	7440-62-2	36.0		0.0231	0.105	2
06149	Zinc	7440-66-6	182		1.47	7.89	5
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0132	J	0.0031	0.107	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8		0.87	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.5	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164640
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31105 SDG#: DE038-17

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	422	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	9.31	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	7.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 14:50	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/05/2011 12:43	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/29/2010 02:50	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 03:08	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/24/2010 03:14	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 12:44	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 11:16	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 10:05	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164640
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31105 SDG#: DE038-17

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 11:16	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:16	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:16	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:45	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 10:05	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:17	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:17	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:17	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:17	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/31/2010 07:01	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:56	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 08:52	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 22:19	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 20:33	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164641
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31005 SDG#: DE038-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	70	U	70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	70	U	70	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164641
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31005 SDG#: DE038-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.40	J	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	7.3		0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	6.9		0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	9.7		0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	2.9		0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	4.1		0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.7	J	6.3	19	1
10138	Chrysene	218-01-9	7.2		0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.82	J	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluoranthene	206-44-0	7.2		0.70	1.8	1
10138	Fluorene	86-73-7	0.70	U	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	2.5		0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.70	U	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.70	U	0.70	1.8	1
10138	Naphthalene	91-20-3	0.70	U	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	0.99	J	0.70	1.8	1
10138	Pyrene	129-00-0	8.9		0.70	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5	1
10401	2,4-DB	94-82-6	1.0	U	1.0	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0	U	1.0	1.8	1
10401	MCPA	94-74-6	98	J	80	260	1
10401	MCPP (Mecoprop)	93-65-2	79	U	79	260	1
10401	2,4,5-T	93-76-5	0.086	U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164641
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31005 SDG#: DE038-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	1.4	U	1.4	3.5	20
01363	Alpha BHC	319-84-6	0.72	U	0.72	3.5	20
01363	Beta BHC	319-85-7	1.3	U	1.3	3.5	20
01363	Gamma BHC - Lindane	58-89-9	0.72	U	0.72	3.5	20
01363	Chlordane	57-74-9	17	U	17	72	20
01363	p,p-DDD	72-54-8	34	U	34	34	20
01363	p,p-DDE	72-55-9	25	U	25	25	20
01363	p,p-DDT	50-29-3	19	U	19	19	20
01363	Delta BHC	319-86-8	0.76	U	0.76	3.5	20
01363	Dieldrin	60-57-1	6.5	U	6.5	7.2	20
01363	Endosulfan I	959-98-8	0.93	U	0.93	3.5	20
01363	Endosulfan II	33213-65-9	2.1	U	2.1	7.2	20
01363	Endosulfan Sulfate	1031-07-8	1.4	U	1.4	7.2	20
01363	Endrin	72-20-8	1.4	U	1.4	7.2	20
01363	Endrin Aldehyde	7421-93-4	6.3	U	6.3	7.2	20
01363	Endrin Ketone	53494-70-5	1.4	U	1.4	7.2	20
01363	Heptachlor	76-44-8	1.3	U	1.3	3.5	20
01363	Heptachlor Epoxide	1024-57-3	14	U	14	14	20
01363	Methoxychlor	72-43-5	7.2	U	7.2	35	20
01363	Mirex	2385-85-5	24	U	24	24	20
01363	Toxaphene	8001-35-2	46	U	46	140	20

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	5.7		0.35	1.8	1
10225	PCB-1260	11096-82-5	1.7	J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164641
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31005 SDG#: DE038-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,400		5.20	20.7	1
07914	Boron	7440-42-8	9.04		0.920	5.17	1
01650	Calcium	7440-70-2	3,890		6.34	20.7	1
01654	Iron	7439-89-6	19,400		4.87	20.7	1
01656	Lithium	7439-93-2	21.0		0.23	2.1	1
01657	Magnesium	7439-95-4	4,640		2.63	10.3	1
06958	Manganese	7439-96-5	273		0.0807	0.517	1
10145	Phosphorus	7723-14-0	423		0.579	10.3	1
01662	Potassium	7440-09-7	2,900		18.6	51.7	1
01667	Sodium	7440-23-5	388		38.6	103	1
07968	Strontium	7440-24-6	23.3		0.0641	0.517	1
06969	Tin	7440-31-5	2.35	J	1.03	10.3	1
06970	Titanium	7440-32-6	1,160		0.393	1.03	1
10146	Zirconium	7440-67-7	1.64	J	0.869	5.17	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.242		0.0633	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.32		0.0633	0.422	2
06126	Barium	7440-39-3	132		0.114	0.422	2
06127	Beryllium	7440-41-7	0.498		0.0169	0.105	2
06128	Cadmium	7440-43-9	0.249		0.0380	0.105	2
06131	Chromium	7440-47-3	18.8		0.127	0.422	2
06132	Cobalt	7440-48-4	5.12		0.0211	0.105	2
06133	Copper	7440-50-8	10.5		0.0696	0.422	2
06135	Lead	7439-92-1	7.48		0.0110	0.211	2
06138	Molybdenum	7439-98-7	0.646		0.0527	0.105	2
06139	Nickel	7440-02-0	10.7		0.105	0.422	2
06141	Selenium	7782-49-2	0.0956	J	0.0422	0.422	2
06142	Silver	7440-22-4	0.0217	J	0.0127	0.105	2
06145	Thallium	7440-28-0	0.241		0.0316	0.105	2
06148	Vanadium	7440-62-2	40.0		0.0232	0.105	2
06149	Zinc	7440-66-6	68.2		0.591	3.16	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0067	J	0.0030	0.104	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.8		0.84	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.6	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164641
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31005 SDG#: DE038-18

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	418	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	8.82	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 15:24	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/05/2011 13:14	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/29/2010 03:18	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 03:22	Jamie L Brillhart	20
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 13:03	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:21	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 10:09	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:21	Joanne M Gates	1
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164641
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31005 SDG#: DE038-18

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:23	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:23	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:49	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 10:09	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:20	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:20	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:20	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/31/2010 07:03	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 14:20	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:57	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 09:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 22:43	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 20:49	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164642
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31205 SDG#: DE038-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	70	U	70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	Dimethylphthalate	131-11-3	19	J	18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	70	U	70	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164642
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31205 SDG#: DE038-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Pentachlorophenol	87-86-5	180	U	180	530	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	4.6	J	3.5	8.8	5
10138	Acenaphthylene	208-96-8	1.8	U	1.8	8.8	5
10138	Anthracene	120-12-7	1.9	J	1.8	8.8	5
10138	Benzo(a)anthracene	56-55-3	27		3.5	8.8	5
10138	Benzo(a)pyrene	50-32-8	21		3.5	8.8	5
10138	Benzo(b)fluoranthene	205-99-2	29		3.5	8.8	5
10138	Benzo(g,h,i)perylene	191-24-2	8.4	J	3.5	8.8	5
10138	Benzo(k)fluoranthene	207-08-9	12		3.5	8.8	5
10138	Butylbenzylphthalate	85-68-7	32	U	32	95	5
10138	Di-n-butylphthalate	84-74-2	32	U	32	95	5
10138	Chrysene	218-01-9	31		1.8	8.8	5
10138	Dibenz(a,h)anthracene	53-70-3	3.5	U	3.5	8.8	5
10138	Diethylphthalate	84-66-2	32	U	32	95	5
10138	Fluoranthene	206-44-0	24		3.5	8.8	5
10138	Fluorene	86-73-7	3.5	U	3.5	8.8	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	6.4	J	3.5	8.8	5
10138	1-Methylnaphthalene	90-12-0	6.1	J	3.5	8.8	5
10138	2-Methylnaphthalene	91-57-6	9.7		3.5	8.8	5
10138	Naphthalene	91-20-3	170		3.5	8.8	5
10138	N-Nitrosodimethylamine	62-75-9	3.5	U	3.5	8.8	5
10138	Di-n-octylphthalate	117-84-0	32	U	32	95	5
10138	Phenanthrene	85-01-8	4.7	J	3.5	8.8	5
10138	Pyrene	129-00-0	26		3.5	8.8	5
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5	1
10401	2,4-DB	94-82-6	1.6	J	0.65	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8	1
10401	MCPA	94-74-6	91	U	91	260	1
10401	MCPP (Mecoprop)	93-65-2	81	J	79	260	1
10401	2,4,5-T	93-76-5	0.086	U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164642
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31205 SDG#: DE038-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.17	1
01363	Beta BHC	319-85-7	0.063	U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.17	1
01363	Chlordane	57-74-9	0.84	U	0.84	3.6	1
01363	p,p-DDD	72-54-8	0.069	U	0.069	0.36	1
01363	p,p-DDE	72-55-9	0.069	U	0.069	0.36	1
01363	p,p-DDT	50-29-3	0.18	U	0.18	0.36	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.069	U	0.069	0.36	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.13	U	0.13	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.069	U	0.069	0.36	1
01363	Endrin	72-20-8	0.069	U	0.069	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.086	U	0.086	0.36	1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.36	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.036	U	0.036	0.17	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.7	1
01363	Mirex	2385-85-5	0.37	U	0.37	0.37	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	5.2		1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	1.0	J	0.35	1.8	1
10225	PCB-1260	11096-82-5	3.1		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,400		5.24	20.8	1
07914	Boron	7440-42-8	9.81		0.928	5.21	1
01650	Calcium	7440-70-2	4,280		6.39	20.8	1
01654	Iron	7439-89-6	18,600		4.91	20.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164642
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31205 SDG#: DE038-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	22.9		0.23	2.1	1
01657	Magnesium	7439-95-4	4,330		2.65	10.4	1
06958	Manganese	7439-96-5	261		0.0813	0.521	1
10145	Phosphorus	7723-14-0	416		0.584	10.4	1
01662	Potassium	7440-09-7	2,880		18.8	52.1	1
01667	Sodium	7440-23-5	972		38.9	104	1
07968	Strontium	7440-24-6	23.1		0.0646	0.521	1
06969	Tin	7440-31-5	2.69	J	1.04	10.4	1
06970	Titanium	7440-32-6	1,110		0.396	1.04	1
10146	Zirconium	7440-67-7	1.60	J	0.875	5.21	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.142	J	0.0613	0.204	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.44		0.0613	0.409	2
06126	Barium	7440-39-3	105		0.110	0.409	2
06127	Beryllium	7440-41-7	0.436		0.0164	0.102	2
06128	Cadmium	7440-43-9	0.241		0.0368	0.102	2
06131	Chromium	7440-47-3	22.7		0.123	0.409	2
06132	Cobalt	7440-48-4	6.05		0.0204	0.102	2
06133	Copper	7440-50-8	11.7		0.0675	0.409	2
06135	Lead	7439-92-1	6.64		0.0106	0.204	2
06138	Molybdenum	7439-98-7	0.684		0.0511	0.102	2
06139	Nickel	7440-02-0	11.9		0.102	0.409	2
06141	Selenium	7782-49-2	0.157	J	0.0409	0.409	2
06142	Silver	7440-22-4	0.0648	J	0.0123	0.102	2
06145	Thallium	7440-28-0	0.197		0.0307	0.102	2
06148	Vanadium	7440-62-2	40.2		0.0225	0.102	2
06149	Zinc	7440-66-6	82.0		0.572	3.07	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0077	J	0.0029	0.101	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.5		0.84	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.6	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	410		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164642
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31205 SDG#: DE038-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	9.23	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	5.0	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 15:59	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/05/2011 13:46	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	12/29/2010 03:46	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/16/2011 21:57	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/24/2010 03:51	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 13:22	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/30/2010 07:25	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 10:13	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/30/2010 07:25	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164642
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

31205 SDG#: DE038-19

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/30/2010 11:27	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103515708008	12/30/2010 11:27	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:53	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 10:13	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:23	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:23	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:23	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/31/2010 07:05	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 14:23	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:58	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 09:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 23:07	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 21:05	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164643
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

02505 SDG#: DE038-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	560	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzoic acid	65-85-0	190	U	190	560	1
04688	Benzyl alcohol	100-51-6	190	U	190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190	1
04688	4-Chloroaniline	106-47-8	74	U	74	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560	1
04688	2,4-Dinitrophenol	51-28-5	740	U	740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	370	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	74	U	74	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	37	U	37	190	1
04688	4-Methylphenol	106-44-5	37	U	37	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	37	U	37	190	1
04688	4-Nitroaniline	100-01-6	74	U	74	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	560	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164643
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

02505 SDG#: DE038-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.74	U	0.74	1.9	1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.9	1
10138	Anthracene	120-12-7	0.42	J	0.37	1.9	1
10138	Benzo(a)anthracene	56-55-3	1.4	J	0.74	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.74	U	0.74	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	1.5	J	0.74	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	2.0		0.74	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.74	U	0.74	1.9	1
10138	Butylbenzylphthalate	85-68-7	8.4	J	6.7	20	1
10138	Di-n-butylphthalate	84-74-2	7.9	J	6.7	20	1
10138	Chrysene	218-01-9	3.4		0.37	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.74	U	0.74	1.9	1
10138	Diethylphthalate	84-66-2	6.7	U	6.7	20	1
10138	Dimethylphthalate	131-11-3	6.7	U	6.7	20	1
10138	Fluoranthene	206-44-0	1.6	J	0.74	1.9	1
10138	Fluorene	86-73-7	6.9		0.74	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.74	U	0.74	1.9	1
10138	1-Methylnaphthalene	90-12-0	1.2	J	0.74	1.9	1
10138	2-Methylnaphthalene	91-57-6	1.2	J	0.74	1.9	1
10138	Naphthalene	91-20-3	2.9		0.74	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.74	U	0.74	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.7	U	6.7	20	1
10138	Phenanthrene	85-01-8	2.5		0.74	1.9	1
10138	Pyrene	129-00-0	2.0		0.74	1.9	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	J	1.3	4.0	1
10401	Dalapon	75-99-0	4.9	U	4.9	10	1
10401	2,4-DB	94-82-6	9.2	U	9.2	9.2	1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.3	1
10401	Dinoseb	88-85-7	0.89	U	0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U	0.89	1.9	1
10401	MCPA	94-74-6	700		85	280	1
10401	MCPP (Mecoprop)	93-65-2	84	U	84	280	1
10401	2,4,5-T	93-76-5	0.092	U	0.092	0.19	1
10401	2,4,5-TP	93-72-1	0.084	U	0.084	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following

*=This limit was used in the evaluation of the final result

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164643
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

02505 SDG#: DE038-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
compounds were affected: 2,4-DB.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.16	U	0.16	0.19	1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.19	1
01363	Beta BHC	319-85-7	0.067	U	0.067	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.038	U	0.038	0.19	1
01363	Chlordane	57-74-9	0.89	U	0.89	3.8	1
01363	p,p-DDD	72-54-8	1.5	U	1.5	1.5	1
01363	p,p-DDE	72-55-9	1.3	U	1.3	1.3	1
01363	p,p-DDT	50-29-3	2.1	U	2.1	2.1	1
01363	Delta BHC	319-86-8	0.22		0.040	0.19	1
01363	Dieldrin	60-57-1	0.33	U	0.33	0.33	1
01363	Endosulfan I	959-98-8	0.18	U	0.18	0.19	1
01363	Endosulfan II	33213-65-9	0.66	U	0.66	0.66	1
01363	Endosulfan Sulfate	1031-07-8	0.074	U	0.074	0.38	1
01363	Endrin	72-20-8	0.074	U	0.074	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.75	U	0.75	0.75	1
01363	Endrin Ketone	53494-70-5	0.074	U	0.074	0.38	1
01363	Heptachlor	76-44-8	0.18	U	0.18	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.10	U	0.10	0.19	1
01363	Methoxychlor	72-43-5	1.1	U	1.1	1.9	1
01363	Mirex	2385-85-5	0.60	U	0.60	0.60	1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.4	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9	1
10225	PCB-1232	11141-16-5	0.58	U	0.58	1.9	1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9	1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9	1
10225	PCB-1254	11097-69-1	1.2	J	0.37	1.9	1
10225	PCB-1260	11096-82-5	0.37	U	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9	1
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,900		5.45	21.7	1
07914	Boron	7440-42-8	9.33		0.964	5.42	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164643
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

02505 SDG#: DE038-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	3,940		6.64	21.7	1
01654	Iron	7439-89-6	19,900		5.10	21.7	1
01656	Lithium	7439-93-2	22.2		0.24	2.2	1
01657	Magnesium	7439-95-4	5,230		2.75	10.8	1
06958	Manganese	7439-96-5	311		0.0845	0.542	1
10145	Phosphorus	7723-14-0	470		0.607	10.8	1
01662	Potassium	7440-09-7	3,320		19.5	54.2	1
01667	Sodium	7440-23-5	67.1	J	40.4	108	1
07968	Strontium	7440-24-6	17.9		0.0672	0.542	1
06969	Tin	7440-31-5	2.54	J	1.08	10.8	1
06970	Titanium	7440-32-6	1,250		0.412	1.08	1
10146	Zirconium	7440-67-7	1.29	J	0.910	5.42	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.136	J	0.0657	0.219	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.21		0.0657	0.438	2
06126	Barium	7440-39-3	118		0.118	0.438	2
06127	Beryllium	7440-41-7	0.488		0.0175	0.109	2
06128	Cadmium	7440-43-9	0.202		0.0394	0.109	2
06131	Chromium	7440-47-3	24.1		0.131	0.438	2
06132	Cobalt	7440-48-4	6.33		0.0219	0.109	2
06133	Copper	7440-50-8	10.6		0.0722	0.438	2
06135	Lead	7439-92-1	14.0		0.0114	0.219	2
06138	Molybdenum	7439-98-7	0.508		0.0547	0.109	2
06139	Nickel	7440-02-0	15.3		0.109	0.438	2
06141	Selenium	7782-49-2	0.160	J	0.0438	0.438	2
06142	Silver	7440-22-4	0.0400	J	0.0131	0.109	2
06145	Thallium	7440-28-0	0.240		0.0328	0.109	2
06148	Vanadium	7440-62-2	47.0		0.0241	0.109	2
06149	Zinc	7440-66-6	70.5		0.613	3.28	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0102	J	0.0031	0.110	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.5		0.89	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.0	U	10.0	33.5	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	

*=This limit was used in the evaluation of the final result

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164643
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

02505 SDG#: DE038-20*

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	472	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.56	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	10.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLE026	01/15/2011 16:34	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLH026	01/05/2011 14:18	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLH026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLE026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103560027A	01/07/2011 10:01	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550007A	01/11/2011 03:51	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540018A	12/29/2010 13:40	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550007A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540018A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103560027A	12/23/2010 01:40	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708008	12/29/2010 10:31	Joanne M Gates	1
01654	Iron	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708008	12/29/2010 10:31	Joanne M Gates	1
01657	Magnesium	SW-846 6010B	1	103515708008	12/29/2010 10:31	Joanne M Gates	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164643
LLI Group # 1225470
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

Submitted: 12/15/2010 09:40
Reported: 01/26/2011 14:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

02505 SDG#: DE038-20*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708008	12/29/2010 10:31	Joanne M Gates	1
01667	Sodium	SW-846 6010B	1	103515708008	12/29/2010 10:31	Joanne M Gates	1
07968	Strontium	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708008	12/24/2010 15:57	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708008	12/29/2010 10:31	Joanne M Gates	1
06124	Antimony	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026003D	12/28/2010 14:26	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026003A	12/31/2010 07:07	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026003C	12/28/2010 14:26	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026003B	12/28/2010 14:26	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026003A	12/28/2010 14:26	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711004	12/20/2010 09:59	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708008	12/19/2010 19:31	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026003	12/19/2010 19:34	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711004	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11006006203B	01/11/2011 09:35	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11001001202B	01/03/2011 23:31	Venia B McFadden	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	10363243202A	01/02/2011 21:21	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11006006203B	01/06/2011 13:35	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11001001202B	01/01/2011 11:30	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	10363243202A	12/29/2010 19:45	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225470
Reported: 01/26/11 at 02:07 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10354SLE026	Sample number(s): 6164621-6164624,6164626-6164643									
Acenaphthene	17	U	17.	170	ug/kg	99		76-111		
Acenaphthylene	17	U	17.	170	ug/kg	99		75-122		
Aniline	170 U		170.	500	ug/kg	48		10-107		
Anthracene	17	U	17.	170	ug/kg	96		76-112		
Benzidine	1,200 U		1,200.	3,300	ug/kg	38		15-121		
Benzo(a)anthracene	17	U	17.	170	ug/kg	101		73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	87		69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	88		61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	84		65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	89		67-125		
Benzoic acid	170 U		170.	500	ug/kg	94		10-154		
Benzyl alcohol	170 U		170.	500	ug/kg	94		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	94		79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	103		75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	94		79-112		
Carbazole	17	U	17.	170	ug/kg	95		77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	98		74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	59		10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	101		70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	96		70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	93		68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	87		67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	100		72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	98		79-110		
Chrysene	17	U	17.	170	ug/kg	97		76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	87		70-128		
Dibenzofuran	17	U	17.	170	ug/kg	98		79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	91		79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	93		70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	90		74-106		
3,3'-Dichlorobenzidine	100 U		100.	330	ug/kg	39		38-105		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	98		75-111		
Diethylphthalate	17	U	17.	170	ug/kg	100		76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	100		72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	107		70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	100		77-109		
4,6-Dinitro-2-methylphenol	170 U		170.	500	ug/kg	88		53-110		
2,4-Dinitrophenol	670 U		670.	2,000	ug/kg	86		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	101		73-115		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225470
Reported: 01/26/11 at 02:07 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	102		79-115		
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	104		77-111		
bis(2-Ethylhexyl)phthalate	17	U	17.	330	ug/kg	104		75-117		
Fluoranthene	17	U	17.	170	ug/kg	94		78-116		
Fluorene	17	U	17.	170	ug/kg	99		75-116		
Hexachlorobenzene	17	U	17.	170	ug/kg	98		78-116		
Hexachlorobutadiene	67	U	67.	170	ug/kg	98		70-112		
Hexachlorocyclopentadiene	170	U	170.	500	ug/kg	106		46-115		
Hexachloroethane	17	U	17.	170	ug/kg	92		68-105		
Indeno(1,2,3-cd)pyrene	17	U	17.	170	ug/kg	87		64-119		
Isophorone	17	U	17.	170	ug/kg	97		69-110		
1-Methylnaphthalene	17	U	17.	170	ug/kg	98		74-105		
2-Methylnaphthalene	17	U	17.	170	ug/kg	92		76-105		
2-Methylphenol	33	U	33.	170	ug/kg	98		66-110		
4-Methylphenol	33	U	33.	170	ug/kg	95		66-117		
Naphthalene	17	U	17.	170	ug/kg	92		73-106		
2-Nitroaniline	17	U	17.	170	ug/kg	104		78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	91		62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	64		49-98		
Nitrobenzene	17	U	17.	170	ug/kg	102		71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	100		81-114		
4-Nitrophenol	170	U	170.	500	ug/kg	101		56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	89		63-107		
N-Nitrosodimethylamine	33	U	33.	170	ug/kg	89		60-106		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	97		67-141		
Di-n-octylphthalate	17	U	17.	170	ug/kg	88		68-130		
Pentachlorophenol	170	U	170.	500	ug/kg	84		35-106		
Phenanthrene	17	U	17.	170	ug/kg	96		77-113		
Phenol	17	U	17.	170	ug/kg	101		58-112		
Pyrene	17	U	17.	170	ug/kg	108		75-115		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	95		73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	98		76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	103		78-111		
Batch number: 10354SLH026	Sample number(s): 6164621-6164624,6164626-6164643									
Acenaphthene	0.67	U	0.67	1.7	ug/kg	76		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	79		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	78		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	77		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	75		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	87		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	69		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	81		66-137		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	82		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	95		84-132		
Chrysene	0.33	U	0.33	1.7	ug/kg	80		79-120		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	73		62-142		
Diethylphthalate	6.0	U	6.0	18	ug/kg	88		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	90		70-130		
Bis(2-Ethylhexyl)phthalate	6.6	J	6.0	18	ug/kg	77		67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	80		78-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	79		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	71		62-141		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	85		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	75		62-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225470
Reported: 01/26/11 at 02:07 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Naphthalene	0.67	U	0.67	1.7	ug/kg	79		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	82		39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	75		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	75		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	73		56-121		
Batch number: 103560027A	Sample number(s): 6164621-6164624,6164626-6164643									
2,4-D	1.2	U	1.2	3.6	ug/kg	137		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	64		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	100		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	88		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	9*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	112		60-141		
MCPA	76	U	76.	250	ug/kg	112		34-113		
MCPP (Mecoprop)	75	U	75.	250	ug/kg	98		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	100		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	88		48-138		
Batch number: 103500020A	Sample number(s): 6164634									
6a Perchlorate EPA 6850	2.1	U	2.1	5.0	ug/kg	99		85-115		
Batch number: 103540018A	Sample number(s): 6164621-6164624,6164626-6164643									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	94	66*	75-125	35*	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	117		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	137		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 103550007A	Sample number(s): 6164621-6164624,6164626-6164643									
Aldrin	0.066	U	0.066	0.17	ug/kg	142*		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	130		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	116		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	116		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	135		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	143*		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	163*		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	131		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	128		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	119		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	110		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	137		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	139*		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	100		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	131		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	102		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	123		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	176*		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225470
Reported: 01/26/11 at 02:07 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 103511026003A	Sample number(s): 6164621-6164643									
Antimony	0.0600	U	0.0600	0.200	mg/kg	117		11-208		
Arsenic	0.0600	U	0.0600	0.400	mg/kg	106		80-120		
Beryllium	0.0160	U	0.0160	0.100	mg/kg	100		82-118		
Cadmium	0.0360	U	0.0360	0.100	mg/kg	103		82-118		
Chromium	0.120	U	0.120	0.400	mg/kg	109		80-120		
Cobalt	0.0200	U	0.0200	0.100	mg/kg	110		82-118		
Copper	0.0941	J	0.0660	0.400	mg/kg	112		80-120		
Lead	0.0104	U	0.0104	0.200	mg/kg	97		80-120		
Nickel	0.100	U	0.100	0.400	mg/kg	112		80-120		
Silver	0.0120	U	0.0120	0.100	mg/kg	101		66-134		
Thallium	0.0300	U	0.0300	0.100	mg/kg	103		81-119		
Vanadium	0.0220	U	0.0220	0.100	mg/kg	102		90-110		
Zinc	0.560	U	0.560	3.00	mg/kg	108		78-122		
Batch number: 103511026003B	Sample number(s): 6164621-6164643									
Selenium	0.0400	U	0.0400	0.400	mg/kg	102		79-122		
Batch number: 103511026003C	Sample number(s): 6164621-6164643									
Molybdenum	0.0500	U	0.0500	0.100	mg/kg	113		78-122		
Batch number: 103511026003D	Sample number(s): 6164621-6164643									
Barium	0.108	U	0.108	0.400	mg/kg	101		79-121		
Batch number: 103515708008	Sample number(s): 6164621-6164643									
Aluminum	5.03	U	5.03	20.0	mg/kg	98		61-110		
Boron	0.890	U	0.890	5.00	mg/kg	96		78-110		
Calcium	7.00	J	6.13	20.0	mg/kg	105		88-110		
Iron	4.71	U	4.71	20.0	mg/kg	99		61-110		
Lithium	0.33	J	0.22	2.0	mg/kg	108		80-120		
Magnesium	2.54	U	2.54	10.0	mg/kg	108		82-110		
Manganese	0.0780	U	0.0780	0.500	mg/kg	103		81-119		
Phosphorus	1.61	J	0.560	10.0	mg/kg	105		80-120		
Potassium	18.0	U	18.0	50.0	mg/kg	105		78-110		
Sodium	37.3	U	37.3	100	mg/kg	109		87-110		
Strontium	0.0620	U	0.0620	0.500	mg/kg	100		79-121		
Tin	1.55	J	1.00	10.0	mg/kg	101		90-114		
Titanium	0.380	U	0.380	1.00	mg/kg	108		80-120		
Zirconium	0.840	U	0.840	5.00	mg/kg	109		80-120		
Batch number: 103515711004	Sample number(s): 6164621-6164643									
Mercury	0.0027	U	0.0027	0.0944	mg/kg	98		88-123		
Batch number: 10363243202A	Sample number(s): 6164621-6164623,6164625-6164643									
3a Cr VI by EPA 7199	0.20	U	0.20	1.0	mg/kg	95		80-120		
Batch number: 11001001202A	Sample number(s): 6164621-6164623,6164625-6164633									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	99		85-115		
Batch number: 11001001202B	Sample number(s): 6164634-6164643									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	99		85-115		
Batch number: 11006006203A	Sample number(s): 6164621-6164623,6164625-6164633									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	105		90-110		
Batch number: 11006006203B	Sample number(s): 6164634-6164643									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	105		90-110		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225470
Reported: 01/26/11 at 02:07 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10350039401B	Sample number(s): 6164621-6164622,6164625-6164627								
22a pH by 9045C					100		95-105		
Batch number: 10350039402A	Sample number(s): 6164628-6164636								
22a pH by 9045C					100		95-105		
Batch number: 10350039402B	Sample number(s): 6164637-6164643								
22a pH by 9045C					100		95-105		
Batch number: 10350182101B	Sample number(s): 6164621-6164622,6164625-6164627								
Oxidation Reduction Potential					100		98-102		
Batch number: 10350182102A	Sample number(s): 6164628-6164636								
Oxidation Reduction Potential					100		98-102		
Batch number: 10350182102B	Sample number(s): 6164637-6164643								
Oxidation Reduction Potential					100		98-102		
Batch number: 10355162401A	Sample number(s): 6164621-6164634								
28a Moisture Content by 160.3					100		80-120		
28a Moisture Content by 160.3					100		80-120		
28a Moisture Content by 160.3					100		80-120		
Batch number: 10355162401B	Sample number(s): 6164635-6164643								
28a Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10354SLE026	Sample number(s): 6164621-6164624,6164626-6164643 UNSPK: 6164622								
Acenaphthene	99	98	75-115	0	30				
Acenaphthylene	104	102	49-126	2	30				
Aniline	60	52	14-114	14	30				
Anthracene	100	99	75-115	1	30				
Benzidine	28*	35	35-141	23	30				
Benzo(a)anthracene	103	100	65-122	3	30				
Benzo(a)pyrene	91	87	57-126	5	30				
Benzo(b)fluoranthene	94	87	59-125	8	30				
Benzo(g,h,i)perylene	90	87	59-127	3	30				
Benzo(k)fluoranthene	92	88	56-132	5	30				
Benzoic acid	46	37	10-173	21	30				
Benzyl alcohol	101	96	55-123	4	30				
4-Bromophenyl-phenylether	96	94	67-129	2	30				
Butylbenzylphthalate	112	106	73-134	5	30				
Di-n-butylphthalate	101	99	67-123	2	30				
Carbazole	100	99	64-120	1	30				
4-Chloro-3-methylphenol	100	99	53-130	1	30				
4-Chloroaniline	78	70	23-95	10	30				
bis(2-Chloroethoxy)methane	101	102	54-117	2	30				
bis(2-Chloroethyl)ether	99	96	60-116	3	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225470
Reported: 01/26/11 at 02:07 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
bis(2-Chloroisopropyl)ether	96	94	55-142	3	30				
2-Chloronaphthalene	82	88	50-141	7	30				
2-Chlorophenol	104	103	73-121	1	30				
4-Chlorophenyl-phenylether	98	98	64-119	0	30				
Chrysene	101	98	62-128	3	30				
Dibenz(a,h)anthracene	94	88	65-125	7	30				
Dibenzofuran	98	99	71-112	1	30				
1,2-Dichlorobenzene	95	91	66-108	5	30				
1,3-Dichlorobenzene	92	89	63-109	3	30				
1,4-Dichlorobenzene	93	89	53-113	4	30				
3,3'-Dichlorobenzidine	70	59	25-123	18	30				
2,4-Dichlorophenol	101	101	78-117	0	30				
Diethylphthalate	100	100	66-118	0	30				
2,4-Dimethylphenol	101	99	56-130	2	30				
3,5-Dimethylphenol	110	109	70-130	1	30				
Dimethylphthalate	101	99	64-118	1	30				
4,6-Dinitro-2-methylphenol	57	49	10-148	16	30				
2,4-Dinitrophenol	30	24	20-143	24	30				
2,4-Dinitrotoluene	101	100	57-114	1	30				
2,6-Dinitrotoluene	103	102	69-123	1	30				
1,2-Diphenylhydrazine	110	106	71-129	3	30				
bis(2-Ethylhexyl)phthalate	112	106	63-122	5	30				
Fluoranthene	97	97	59-122	0	30				
Fluorene	96	97	60-125	2	30				
Hexachlorobenzene	102	98	61-111	4	30				
Hexachlorobutadiene	96	93	62-120	3	30				
Hexachlorocyclopentadiene	80	76	10-153	5	30				
Hexachloroethane	90	90	57-109	0	30				
Indeno(1,2,3-cd)pyrene	92	88	61-126	4	30				
Isophorone	97	95	51-118	2	30				
1-Methylnaphthalene	100	99	73-112	2	30				
2-Methylnaphthalene	94	92	76-114	3	30				
2-Methylphenol	102	103	47-142	1	30				
4-Methylphenol	102	98	55-126	4	30				
Naphthalene	93	90	72-116	3	30				
2-Nitroaniline	105	108	67-125	3	30				
3-Nitroaniline	100	98	59-122	2	30				
4-Nitroaniline	76	73	52-112	4	30				
Nitrobenzene	102	100	51-114	2	30				
2-Nitrophenol	98	94	74-115	4	30				
4-Nitrophenol	98	98	39-133	0	30				
N-Nitroso-di-n-propylamine	95	92	60-116	3	30				
N-Nitrosodimethylamine	89	88	47-116	1	30				
N-Nitrosodiphenylamine	102	100	86-145	2	30				
Di-n-octylphthalate	97	91	56-126	7	30				
Pentachlorophenol	77	69	17-149	11	30				
Phenanthrene	100	98	65-125	2	30				
Phenol	108	104	58-126	4	30				
Pyrene	110	110	51-151	0	30				
1,2,4-Trichlorobenzene	96	96	72-115	1	30				
2,4,5-Trichlorophenol	101	101	34-139	1	30				
2,4,6-Trichlorophenol	104	105	49-140	1	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225470
Reported: 01/26/11 at 02:07 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10354SLH026	Sample number(s): 6164621-6164624,6164626-6164643 UNSPK: 6164622								
Acenaphthene	75	77	63-105	3	30				
Acenaphthylene	77	79	55-126	3	30				
Anthracene	77	79	46-136	3	30				
Benzo(a)anthracene	69	75	39-144	7	30				
Benzo(a)pyrene	56	63	34-156	9	30				
Benzo(b)fluoranthene	53	60	43-155	9	30				
Benzo(g,h,i)perylene	41	56	33-141	23	30				
Benzo(k)fluoranthene	61	63	42-144	3	30				
Butylbenzylphthalate	97	101	73-140	4	30				
Di-n-butylphthalate	85	87	78-160	2	30				
Chrysene	29	55	29-156	28	30				
Dibenz(a,h)anthracene	54	65	41-130	18	30				
Diethylphthalate	87	90	87-131	3	30				
Dimethylphthalate	87	92	74-118	5	30				
Bis(2-Ethylhexyl)phthalate	67	75	39-167	7	30				
Fluoranthene	65	69	26-166	4	30				
Fluorene	79	80	45-121	2	30				
Indeno(1,2,3-cd)pyrene	47	60	21-143	21	30				
1-Methylnaphthalene	82	82	72-123	0	30				
2-Methylnaphthalene	71	72	28-121	1	30				
Naphthalene	76	76	61-102	0	30				
N-Nitrosodimethylamine	73	75	48-113	3	30				
Di-n-octylphthalate	70	77	40-192	7	30				
Phenanthrene	67	72	12-165	6	30				
Pyrene	57	66	15-153	10	30				
Batch number: 103560027A	Sample number(s): 6164621-6164624,6164626-6164643 UNSPK: 6164622								
2,4-D	131	93	28-161	34	35				
Dalapon	72	0*	12-86	200*	50				
2,4-DB	59	83	20-170	21	50				
Dicamba	104	88	33-120	16	50				
Dinoseb	9	6	1-44	40*	35				
2,4-DP (Dichlorprop)	102	113	55-141	11	50				
MCPA	27*	119	31-184	59*	50				
MCPP (Mecoprop)	63	71	16-174	9	50				
2,4,5-T	90	65	25-132	33	35				
2,4,5-TP	76	100	10-183	27	35				
Batch number: 103500020A	Sample number(s): 6164634 UNSPK: P164948								
6a Perchlorate EPA 6850	100	100	80-120	0	20				
Batch number: 103540018A	Sample number(s): 6164621-6164624,6164626-6164643 UNSPK: 6164622								
PCB-1016	215*	143	29-146	41	50				
PCB-1260	186*	152*	39-149	19	50				
Batch number: 103550007A	Sample number(s): 6164621-6164624,6164626-6164643 UNSPK: 6164622								
Aldrin	88	97	16-126	10	50				
Alpha BHC	103	127	10-129	21	50				
Beta BHC	103	122	14-147	17	50				
Gamma BHC - Lindane	95	105	10-140	11	50				
p,p-DDD	103	135	16-163	27	50				
p,p-DDE	114	100	18-161	14	50				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225470
Reported: 01/26/11 at 02:07 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
p,p-DDT	113	166	10-176	38	50				
Delta BHC	119	84	23-140	34	50				
Dieldrin	91	111	19-154	20	50				
Endosulfan I	89	108	16-137	20	50				
Endosulfan II	92	113	28-154	20	50				
Endosulfan Sulfate	111	113	21-160	1	50				
Endrin	95	118	11-149	22	50				
Endrin Aldehyde	71	82	10-148	15	35				
Endrin Ketone	92	100	22-165	8	50				
Heptachlor	88	96	13-126	9	50				
Heptachlor Epoxide	94	113	13-157	19	50				
Methoxychlor	132	163*	32-147	21	50				
Batch number: 103511026003A	Sample number(s): 6164621-6164643 UNSPK: 6164622 BKG: 6164622								
Antimony	68*	67*	75-125	2	20	0.149 J	0.140 J	6 (1)	20
Arsenic	167*	111	75-125	20	20	3.04	3.25	6	20
Beryllium	97	98	75-125	0	20	0.282	0.247	13 (1)	20
Cadmium	107	107	75-125	1	20	0.116	0.114	2 (1)	20
Chromium	118	110	75-125	5	20	8.10	8.21	1	20
Cobalt	89	92	75-125	2	20	3.61	3.69	2	20
Copper	111	100	75-125	7	20	5.45	5.21	4	20
Lead	110	113	75-125	1	20	5.62	5.76	3	20
Nickel	105	102	75-125	2	20	5.27	4.92	7	20
Silver	106	101	75-125	6	20	0.0148 J	0.0165 J	11 (1)	20
Thallium	99	110	75-125	8	20	0.0967 J	0.0894 J	8 (1)	20
Vanadium	134*	114	75-125	7	20	16.8	16.4	2	20
Zinc	112	91	75-125	6	20	25.2	24.4	3	20
Batch number: 103511026003B	Sample number(s): 6164621-6164643 UNSPK: 6164622 BKG: 6164622								
Selenium	92	91	75-125	3	20	0.140 J	0.111 J	23* (1)	20
Batch number: 103511026003C	Sample number(s): 6164621-6164643 UNSPK: 6164622 BKG: 6164622								
Molybdenum	105	104	75-125	2	20	0.297	0.321	8 (1)	20
Batch number: 103511026003D	Sample number(s): 6164621-6164643 UNSPK: 6164622 BKG: 6164622								
Barium	152 (2)	96 (2)	75-125	10	20	46.1	49.3	7	20
Batch number: 103515708008	Sample number(s): 6164621-6164643 UNSPK: 6164622 BKG: 6164622								
Aluminum	1443 (2)	1911 (2)	75-125	9	20	7,430	6,570	12	20
Boron	95	98	84-115	4	20	5.67	4.92 J	14 (1)	20
Calcium	-1 (2)	211 (2)	75-125	35*	20	1,990	1,700	15	20
Iron	-985 (2)	-358 (2)	75-125	6	20	10,000	8,770	13	20
Lithium	98	100	82-114	3	20	7.3	5.6	25* (1)	20
Magnesium	14 (2)	97 (2)	75-125	9	20	1,770	1,360	26*	20
Manganese	60*	98	75-125	11	20	126	112	12	20
Phosphorus	97	89	75-125	2	20	260	229	13	20
Potassium	95	113	75-125	8	20	1,380	1,110	22*	20
Sodium	103	104	75-125	2	20	47.7 J	39.0 J	20 (1)	20
Strontium	99	99	75-115	1	20	24.0	23.7	1	20
Tin	96	96	80-110	1	20	2.07 J	1.85 J	11 (1)	20
Titanium	93	133*	75-125	8	20	387	301	25*	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225470
Reported: 01/26/11 at 02:07 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Zirconium	99	100	75-125	3	20	2.08	J	2.38	J	13 (1)	20
Batch number: 103515711004	Sample number(s): 6164621-6164643 UNSPK: 6164622 BKG: 6164622										
Mercury	96	95	65-135	3	20	0.0099	J	0.0088	J	11 (1)	20
Batch number: 10363243202A	Sample number(s): 6164621-6164623,6164625-6164643 UNSPK: 6164622 BKG: 6164622										
3a Cr VI by EPA 7199	100		75-125			0.20	U	0.54	J	200* (1)	20
Batch number: 11001001202A	Sample number(s): 6164621-6164623,6164625-6164633 UNSPK: 6164622 BKG: 6164622										
7a Perchlorate EPA 314.0	88		80-120			9.0	U	9.0	U	0 (1)	15
Batch number: 11001001202B	Sample number(s): 6164634-6164643 UNSPK: 6164634 BKG: 6164634										
7a Perchlorate EPA 314.0	89		80-120			9.0	U	9.0	U	0 (1)	15
Batch number: 11006006203A	Sample number(s): 6164621-6164623,6164625-6164633 UNSPK: 6164622 BKG: 6164622										
11a Anions by 300.0 - Fluoride	100		80-120			0.80	U	1.3		200* (1)	20
Batch number: 11006006203B	Sample number(s): 6164634-6164643 UNSPK: 6164634 BKG: 6164634										
11a Anions by 300.0 - Fluoride	102		80-120			1.4		0.99	J	34* (1)	20
Batch number: 10350039401B	Sample number(s): 6164621-6164622,6164625-6164627 BKG: 6164622										
22a pH by 9045C						8.38		8.39		0	1
Batch number: 10350039402A	Sample number(s): 6164628-6164636 BKG: 6164628										
22a pH by 9045C						8.20		8.28		1	1
Batch number: 10350039402B	Sample number(s): 6164637-6164643 BKG: P164946										
22a pH by 9045C						8.25		8.21		0	1
Batch number: 10350182101B	Sample number(s): 6164621-6164622,6164625-6164627 BKG: 6164622										
Oxidation Reduction Potential						414		419		1	6
Batch number: 10350182102A	Sample number(s): 6164628-6164636 BKG: 6164628										
Oxidation Reduction Potential						402		398		1	6
Batch number: 10350182102B	Sample number(s): 6164637-6164643 BKG: P164946										
Oxidation Reduction Potential						426		428		1	6
Batch number: 10355162401A	Sample number(s): 6164621-6164634 BKG: 6164622										
28a Moisture Content by 160.3						4.1		4.0		1	20
28a Moisture Content by 160.3						4.1		4.0		1	20
28a Moisture Content by 160.3						4.1		4.0		1	20
Batch number: 10355162401B	Sample number(s): 6164635-6164643 BKG: 6164635										
28a Moisture Content by 160.3						6.2		6.0		3	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225470
Reported: 01/26/11 at 02:07 PM

Surrogate Quality Control

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 10354SLE026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6164621	97	97	99	84	93	95
6164622	92	87	90	77	89	93
6164623	101	99	104	91	92	95
6164624	101	98	106	91	94	93
6164626	98	96	97	81	93	100
6164627	102	100	105	86	95	96
6164628	96	94	100	84	94	98
6164629	98	96	92	81	94	93
6164630	93	96	97	87	100	92
6164631	94	95	109	85	96	88
6164632	95	95	99	82	95	93
6164633	76	76	80	68	77	71
6164634	92	94	100	85	98	90
6164635	87	89	96	82	93	82
6164636	89	91	100	81	95	86
6164637	93	93	91	79	87	82
6164638	98	97	100	84	96	96
6164639	91	90	95	81	90	88
6164640	95	95	99	86	97	90
6164641	93	92	97	80	93	90
6164642	96	95	98	88	95	96
6164643	93	93	100	86	95	96
Blank	95	95	104	90	101	98
LCS	98	98	107	94	94	97
MS	101	99	104	91	92	95
MSD	101	98	106	91	94	93
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10354SLH026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6164621	94	76	83
6164622	86	69	79
6164623	85	69	77
6164624	86	70	80
6164626	82	75	81
6164627	79	71	73
6164628	87	74	93
6164629	78	65	81
6164630	86	70	87
6164631	85	73	91
6164632	86	74	90
6164633	84	73	91
6164634	89	74	83
6164635	84	72	81
6164636	88	75	80
6164637	102	72	78
6164638	86	72	79
6164639	87	71	82
6164640	88	81	72
6164641	80	74	72

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225470
Reported: 01/26/11 at 02:07 PM

Surrogate Quality Control

6164642	83	78	69
6164643	112	76	101
Blank	86	68	75
LCS	90	69	76
MS	85	69	77
MSD	86	70	80
Limits:	40-130	45-130	45-135

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 103540018A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6164621	103	129*
6164622	115	137*
6164623	153*	161*
6164624	123	134*
6164626	129	126*
6164627	159*	173*
6164628	118	106
6164629	120	115
6164630	145*	137*
6164631	134	140*
6164632	123	113
6164633	159*	179*
6164634	70	128*
6164635	107	126*
6164636	119	125*
6164637	108	120
6164638	105	141*
6164639	106	114
6164640	107	79
6164641	134	97
6164642	137	97
6164643	134	116
Blank	121	144*
LCS	96	115
LCSD	101	131*
MS	154*	161*
MSD	123	134*
Limits:	53-139	45-120

Analysis Name: 12a Pesticides by 8081A
Batch number: 103550007A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6164621	88	244*
6164622	80	162*
6164623	65	98
6164624	84	108
6164626	92	97
6164627	84	107
6164628	93	93
6164629	94	87
6164630	84	99
6164631	90	85
6164632	85	73

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225470
Reported: 01/26/11 at 02:07 PM

Surrogate Quality Control

6164633	70	93
6164634	81	94
6164635	87	90
6164636	81	103
6164637	81	220*
6164638	82	137*
6164639	92	103
6164640	94	141*
6164641	74	0*
6164642	77	88
6164643	85	62
Blank	99	125*
LCS	101	133*
MS	65	98
MSD	85	108
Limits:	50-130	20-120

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 103560027A

	2,4-Dichlorophenylacetic acid
6164621	119
6164622	89
6164623	95
6164624	148
6164626	108
6164627	80
6164628	133
6164629	109
6164630	162*
6164631	115
6164632	105
6164633	118
6164634	81
6164635	74
6164636	114
6164637	110
6164638	174*
6164639	62
6164640	226*
6164641	86
6164642	113
6164643	53
Blank	113
LCS	123
MS	95
MSD	148
Limits:	36-156

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

13013 1225470 61644621-43

CHAIN OF CUSTODY RECORD

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-EFH EPA 8015B Mod.	*Metals EPA 6010/6020/7471A	**Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	*Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-002-SA5C-SB-4.0-5.0	12.14.10	0942	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-002-SA5C-SB-9.0-10.0	12.14.10	0950	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
TB-121410	12.14.10	0800	water	HCl	2-40 mL VOA vials	X	X		X																				trip blank
EB02-SA5B-121410	12.14.10	1230	water	none	6-1 liter ambers			X						X	X			X	X										rinsate
EB02-SA5B-121410	12.14.10	1230	water	none	1-500 ml poly							X	X			X													rinsate
EB02-SA5B-121410	12.14.10	1230	water	HNO3	1-500 ml poly						X																		rinsate
EB02-SA5B-121410	12.14.10	1230	water	HCl	6-40 mL amber VOA vials	X	X		X																				rinsate
SL-002-SA5C-SB-9.5	12.14.10	0948	soil	none	5 Encore Samplers	X	X		X																				
SL-002-SA5C-SB-4.5	12.14.10	0938	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-4.5	12.14.10	1104	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-9.5	12.14.10	1115	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-9.0-10.0	12.14.10	1118	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-004-SA5C-SB-4.0-5.0	12.14.10	1111	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-140-SA5C-SB-3.0-4.0	12.14.10	1428	soil	none	2 x 16 oz. jars			X			X	X	X	X	X	X													
SL-140-SA5C-SB-3.5	12.14.10	1425	soil	none	5 Encore Samplers	X	X																						
DUP05-SA5B-QC-121410	12.14.10	0850	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									DUP
SL-120-SA5B-SS-0.0-0.5MS	12.14.10	0847	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X			X	X									MS/MSD
SL-108-SA5B-SS-0.0-0.5	12.14.10	0855	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-119-SA5B-SS-0.0-0.5	12.14.10	0830	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-240-SA5B-SS-0.0-0.5	12.14.10	0933	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-109-SA5B-SS-0.0-0.5	12.14.10	0909	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-122-SA5B-SS-0.0-0.5	12.14.10	0940	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-121-SA5B-SS-0.0-0.5	12.14.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-054-SA5B-SS-0.0-0.5	12.14.10	0921	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-105-SA5B-SS-0.0-0.5	12.14.10	0835	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-098-SA5B-SS-0.0-0.5	12.14.10	1043	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X	X									
SL-142-SA5B-SS-0.0-0.5	12.14.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-143-SA5B-SS-0.0-0.5	12.14.10	1115	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-123-SA5B-SS-0.0-0.5	12.14.10	1040	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-124-SA5B-SS-0.0-0.5	12.14.10	1100	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-309-SA5B-SS-0.0-0.5	12.14.10	1325	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-311-SA5B-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-310-SA5B-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-312-SA5B-SS-0.0-0.5	12.14.10	1427	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-025-SIV-SD-0.0-0.5	12.14.10	1244	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-024-SIV-SD-0.0-0.5	12.14.10	1116	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X	X									
SED-023-SIV-SD-0.0-0.5	12.14.10	0919	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-022-SIV-SD-0.0-0.5	12.14.10	1008	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-125-SA5B-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-126-SA5B-SS-0.0-0.5	12.14.10	1420	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-129-SA5B-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-128-SA5B-SS-0.0-0.5	12.14.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-027-SIV-SD-0.0-0.5	12.14.10	1559	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-026-SIV-SD-0.0-0.5	12.14.10	1522	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-060-SA5C-SB-10.0-11.0	12.14.10	1618	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-060-SA5C-SB-10.5	12.14.10	1614	soil	none	5 Encore Samplers	X	X		X																				

Relinquished by: *(Signature)*	Date/Time	Received for Laboratory by: *(Signature)*	Date/Time		
	12.14.10 1700		12/15/10 946		Laboratory: Lancaster Laboratories, Inc.
Received by: *(Signature)*	Date/Time	Airbill No.			
		00732992 Tracking Number 869514317156			No. of coolers = 5

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 02, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/15/2010
Group Number: 1225471
SDG: DX022
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
DUP05-SA5B-QC-121410 Grab Soil	6164644
SL-120-SA5B-SS-0.0-0.5 Grab Soil	6164645
SL-120-SA5B-SS-0.0-0.5MS Grab Soil	6164646
SL-120-SA5B-SS-0.0-0.5MSD Grab Soil	6164647
SL-108-SA5B-SS-0.0-0.5 Grab Soil	6164648
SL-119-SA5B-SS-0.0-0.5 Grab Soil	6164649
SL-240-SA5B-SS-0.0-0.5 Grab Soil	6164650
SL-109-SA5B-SS-0.0-0.5 Grab Soil	6164651
SL-122-SA5B-SS-0.0-0.5 Grab Soil	6164652
SL-121-SA5B-SS-0.0-0.5 Grab Soil	6164653
SL-054-SA5B-SS-0.0-0.5 Grab Soil	6164654
SL-105-SA5B-SS-0.0-0.5 Grab Soil	6164655
SL-098-SA5B-SS-0.0-0.5 Grab Soil	6164656
SL-142-SA5B-SS-0.0-0.5 Grab Soil	6164657
SL-143-SA5B-SS-0.0-0.5 Grab Soil	6164658
SL-123-SA5B-SS-0.0-0.5 Grab Soil	6164659
SL-124-SA5B-SS-0.0-0.5 Grab Soil	6164660
SL-309-SA5B-SS-0.0-0.5 Grab Soil	6164661
SL-311-SA5B-SS-0.0-0.5 Grab Soil	6164662
SL-310-SA5B-SS-0.0-0.5 Grab Soil	6164663
SL-312-SA5B-SS-0.0-0.5 Grab Soil	6164664
SED-025-SIV-SD-0.0-0.5 Grab Soil	6164665

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

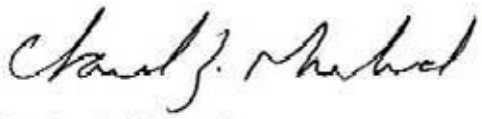
Analysis Report

ELECTRONIC COPY TO CDM Federal Services Program Attn: Todd Burgesser

1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Charles J. Neslund
Manager

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164644
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP05 SDG#: DX022-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	3.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164644
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP05 SDG#: DX022-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0203	U	0.0203	1.04	1
11031	12378-PeCDD	40321-76-4	0.138	JBQ	0.0322	5.18	1
11031	123478-HxCDD	39227-28-6	0.228	JB	0.0327	5.18	1
11031	123678-HxCDD	57653-85-7	0.572	JB	0.0343	5.18	1
11031	123789-HxCDD	19408-74-3	0.535	JB	0.0357	5.18	1
11031	1234678-HpCDD	35822-46-9	16.7	B	0.0535	5.18	1
11031	OCDD	3268-87-9	172	B	0.0519	10.4	1
11031	2378-TCDF	51207-31-9	0.0808	JB	0.0242	1.04	1
11031	12378-PeCDF	57117-41-6	0.134	JB	0.0161	5.18	1
11031	23478-PeCDF	57117-31-4	0.300	JBQ	0.0159	5.18	1
11031	123478-HxCDF	70648-26-9	0.356	JBQ	0.0248	5.18	1
11031	123678-HxCDF	57117-44-9	0.286	JB	0.0238	5.18	1
11031	123789-HxCDF	72918-21-9	0.230	JB	0.0297	5.18	1
11031	234678-HxCDF	60851-34-5	0.541	JBQ	0.0242	5.18	1
11031	1234678-HpCDF	67562-39-4	4.47	JB	0.0222	5.18	1
11031	1234789-HpCDF	55673-89-7	0.410	JB	0.0322	5.18	1
11031	OCDF	39001-02-0	10.3	JB	0.0392	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	70	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164644
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP05 SDG#: DX022-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP05-SA5B-QC-121410 Grab Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5B-QC-121410

LLI Sample # SW 6164644
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:50

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP05 SDG#: DX022-01FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/17/2011 23:19	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164645
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-120 SDG#: DX022-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164645
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-120 SDG#: DX022-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0355	JBQ	0.0191	1.04	1
11031	12378-PeCDD	40321-76-4	0.101	JBQ	0.0297	5.21	1
11031	123478-HxCDD	39227-28-6	0.237	JB	0.0350	5.21	1
11031	123678-HxCDD	57653-85-7	0.657	JB	0.0367	5.21	1
11031	123789-HxCDD	19408-74-3	0.523	JB	0.0344	5.21	1
11031	1234678-HpCDD	35822-46-9	18.5	B	0.0677	5.21	1
11031	OCDD	3268-87-9	199	B	0.0527	10.4	1
11031	2378-TCDF	51207-31-9	0.121	JB	0.0224	1.04	1
11031	12378-PeCDF	57117-41-6	0.138	JB	0.0142	5.21	1
11031	23478-PeCDF	57117-31-4	0.265	JB	0.0142	5.21	1
11031	123478-HxCDF	70648-26-9	0.316	JB	0.0261	5.21	1
11031	123678-HxCDF	57117-44-9	0.327	JB	0.0229	5.21	1
11031	123789-HxCDF	72918-21-9	0.231	JB	0.0307	5.21	1
11031	234678-HxCDF	60851-34-5	0.483	JB	0.0255	5.21	1
11031	1234678-HpCDF	67562-39-4	4.62	JB	0.0204	5.21	1
11031	1234789-HpCDF	55673-89-7	0.470	JB	0.0350	5.21	1
11031	OCDF	39001-02-0	11.5	B	0.0335	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164645
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-120 SDG#: DX022-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164645
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-120 SDG#: DX022-02BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 00:16	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164646
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-120 SDG#: DX022-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164646
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-120 SDG#: DX022-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.6	B	0.0227	1.04	1
11031	12378-PeCDD	40321-76-4	113	B	0.0381	5.21	1
11031	123478-HxCDD	39227-28-6	116	B	0.0393	5.21	1
11031	123678-HxCDD	57653-85-7	114	B	0.0408	5.21	1
11031	123789-HxCDD	19408-74-3	115	B	0.0405	5.21	1
11031	1234678-HpCDD	35822-46-9	133	B	0.0728	5.21	1
11031	OCDD	3268-87-9	436	B	0.0685	10.4	1
11031	2378-TCDF	51207-31-9	22.7	B	0.0324	1.04	1
11031	12378-PeCDF	57117-41-6	113	B	0.0213	5.21	1
11031	23478-PeCDF	57117-31-4	112	B	0.0210	5.21	1
11031	123478-HxCDF	70648-26-9	108	B	0.0422	5.21	1
11031	123678-HxCDF	57117-44-9	107	B	0.0396	5.21	1
11031	123789-HxCDF	72918-21-9	110	B	0.0470	5.21	1
11031	234678-HxCDF	60851-34-5	109	B	0.0400	5.21	1
11031	1234678-HpCDF	67562-39-4	114	B	0.0449	5.21	1
11031	1234789-HpCDF	55673-89-7	109	B	0.0569	5.21	1
11031	OCDF	39001-02-0	237	B	0.0453	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	67	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-120-SA5B-SS-0.0-0.5MS Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164646
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-120 SDG#: DX022-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5MS Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164646
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-120 SDG#: DX022-02MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 01:12	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164647
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-120 SDG#: DX022-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164647
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-120 SDG#: DX022-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.6	B	0.0286	1.04	1
11031	12378-PeCDD	40321-76-4	112	B	0.0523	5.21	1
11031	123478-HxCDD	39227-28-6	115	B	0.0472	5.21	1
11031	123678-HxCDD	57653-85-7	113	B	0.0482	5.21	1
11031	123789-HxCDD	19408-74-3	114	B	0.0498	5.21	1
11031	1234678-HpCDD	35822-46-9	130	B	0.0924	5.21	1
11031	OCDD	3268-87-9	391	B	0.0794	10.4	1
11031	2378-TCDF	51207-31-9	23.4	B	0.0348	1.04	1
11031	12378-PeCDF	57117-41-6	114	B	0.0222	5.21	1
11031	23478-PeCDF	57117-31-4	114	B	0.0221	5.21	1
11031	123478-HxCDF	70648-26-9	109	B	0.0483	5.21	1
11031	123678-HxCDF	57117-44-9	109	B	0.0448	5.21	1
11031	123789-HxCDF	72918-21-9	110	B	0.0596	5.21	1
11031	234678-HxCDF	60851-34-5	110	B	0.0475	5.21	1
11031	1234678-HpCDF	67562-39-4	114	B	0.0543	5.21	1
11031	1234789-HpCDF	55673-89-7	110	B	0.0812	5.21	1
11031	OCDF	39001-02-0	230	B	0.0566	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	63	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164647
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-120 SDG#: DX022-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SS-0.0-0.5MSD Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SS-0.0-0.5

LLI Sample # SW 6164647
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:47

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-120 SDG#: DX022-02MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 02:09	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164648
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-108 SDG#: DX022-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164648
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-108 SDG#: DX022-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0648	JB	0.0247	1.05	1
11031	12378-PeCDD	40321-76-4	0.343	JBQ	0.0435	5.23	1
11031	123478-HxCDD	39227-28-6	0.722	JB	0.0343	5.23	1
11031	123678-HxCDD	57653-85-7	3.51	JB	0.0348	5.23	1
11031	123789-HxCDD	19408-74-3	1.50	JB	0.0369	5.23	1
11031	1234678-HpCDD	35822-46-9	104	B	0.136	5.23	1
11031	OCDD	3268-87-9	1,070	B	0.0865	10.5	1
11031	2378-TCDF	51207-31-9	0.113	JBQ	0.0315	1.05	1
11031	12378-PeCDF	57117-41-6	0.542	JB	0.0172	5.23	1
11031	23478-PeCDF	57117-31-4	0.502	JB	0.0167	5.23	1
11031	123478-HxCDF	70648-26-9	0.526	JB	0.0303	5.23	1
11031	123678-HxCDF	57117-44-9	0.641	JB	0.0280	5.23	1
11031	123789-HxCDF	72918-21-9	0.431	JB	0.0356	5.23	1
11031	234678-HxCDF	60851-34-5	1.02	JB	0.0295	5.23	1
11031	1234678-HpCDF	67562-39-4	11.2	B	0.0287	5.23	1
11031	1234789-HpCDF	55673-89-7	1.13	JB	0.0446	5.23	1
11031	OCDF	39001-02-0	26.2	B	0.0371	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164648
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-108 SDG#: DX022-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-108-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-108-SA5B-SS-0.0-0.5

LLI Sample # SW 6164648
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:55

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-108 SDG#: DX022-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 03:05	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164649
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-119 SDG#: DX022-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	7.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164649
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-119 SDG#: DX022-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0212	U	0.0212	1.08	1
11031	12378-PeCDD	40321-76-4	0.213	JBQ	0.0416	5.41	1
11031	123478-HxCDD	39227-28-6	0.310	JBQ	0.0346	5.41	1
11031	123678-HxCDD	57653-85-7	0.914	JB	0.0357	5.41	1
11031	123789-HxCDD	19408-74-3	0.972	JB	0.0363	5.41	1
11031	1234678-HpCDD	35822-46-9	23.8	B	0.0657	5.41	1
11031	OCDD	3268-87-9	278	B	0.0617	10.8	1
11031	2378-TCDF	51207-31-9	0.0754	JBQ	0.0316	1.08	1
11031	12378-PeCDF	57117-41-6	0.219	JBQ	0.0186	5.41	1
11031	23478-PeCDF	57117-31-4	0.302	JBQ	0.0187	5.41	1
11031	123478-HxCDF	70648-26-9	0.337	JB	0.0325	5.41	1
11031	123678-HxCDF	57117-44-9	0.438	JB	0.0285	5.41	1
11031	123789-HxCDF	72918-21-9	0.485	JBQ	0.0380	5.41	1
11031	234678-HxCDF	60851-34-5	0.610	JBQ	0.0305	5.41	1
11031	1234678-HpCDF	67562-39-4	6.00	B	0.0233	5.41	1
11031	1234789-HpCDF	55673-89-7	0.549	JBQ	0.0379	5.41	1
11031	OCDF	39001-02-0	15.6	B	0.0367	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	97	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	63	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-119-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164649
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-119 SDG#: DX022-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-119-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SS-0.0-0.5

LLI Sample # SW 6164649
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:30

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-119 SDG#: DX022-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 04:02	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164650
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-240 SDG#: DX022-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164650
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-240 SDG#: DX022-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0375	U	0.0375	1.04	1
11031	12378-PeCDD	40321-76-4	0.546	JBQ	0.0842	5.21	1
11031	123478-HxCDD	39227-28-6	1.08	JB	0.0529	5.21	1
11031	123678-HxCDD	57653-85-7	3.93	JB	0.0531	5.21	1
11031	123789-HxCDD	19408-74-3	1.48	JB	0.0520	5.21	1
11031	1234678-HpCDD	35822-46-9	92.3	B	0.152	5.21	1
11031	OCDD	3268-87-9	972	B	0.125	10.4	1
11031	2378-TCDF	51207-31-9	0.130	JB	0.0486	1.04	1
11031	12378-PeCDF	57117-41-6	0.327	JB	0.0294	5.21	1
11031	23478-PeCDF	57117-31-4	0.539	JB	0.0284	5.21	1
11031	123478-HxCDF	70648-26-9	0.602	JB	0.0450	5.21	1
11031	123678-HxCDF	57117-44-9	0.656	JB	0.0415	5.21	1
11031	123789-HxCDF	72918-21-9	0.298	JBQ	0.0510	5.21	1
11031	234678-HxCDF	60851-34-5	0.932	JBQ	0.0448	5.21	1
11031	1234678-HpCDF	67562-39-4	10.2	B	0.0386	5.21	1
11031	1234789-HpCDF	55673-89-7	0.907	JB	0.0540	5.21	1
11031	OCDF	39001-02-0	21.7	B	0.0549	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	61	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	82	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164650
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-240 SDG#: DX022-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-240-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-240-SA5B-SS-0.0-0.5

LLI Sample # SW 6164650
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:33

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-240 SDG#: DX022-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 04:58	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164651
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-109 SDG#: DX022-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164651
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-109 SDG#: DX022-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0406	JBQ	0.0221	1.06	1
11031	12378-PeCDD	40321-76-4	0.245	JB	0.0408	5.31	1
11031	123478-HxCDD	39227-28-6	0.553	JB	0.0497	5.31	1
11031	123678-HxCDD	57653-85-7	2.38	JB	0.0518	5.31	1
11031	123789-HxCDD	19408-74-3	0.967	JB	0.0486	5.31	1
11031	1234678-HpCDD	35822-46-9	65.3	B	0.0994	5.31	1
11031	OCDD	3268-87-9	689	B	0.0790	10.6	1
11031	2378-TCDF	51207-31-9	0.0866	JB	0.0224	1.06	1
11031	12378-PeCDF	57117-41-6	0.247	JB	0.0134	5.31	1
11031	23478-PeCDF	57117-31-4	0.376	JB	0.0138	5.31	1
11031	123478-HxCDF	70648-26-9	0.435	JB	0.0296	5.31	1
11031	123678-HxCDF	57117-44-9	0.461	JB	0.0258	5.31	1
11031	123789-HxCDF	72918-21-9	0.314	JBQ	0.0323	5.31	1
11031	234678-HxCDF	60851-34-5	0.772	JBQ	0.0285	5.31	1
11031	1234678-HpCDF	67562-39-4	7.18	B	0.0287	5.31	1
11031	1234789-HpCDF	55673-89-7	0.812	JBQ	0.0448	5.31	1
11031	OCDF	39001-02-0	16.0	B	0.0493	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-109-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164651
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-109 SDG#: DX022-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-109-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-109-SA5B-SS-0.0-0.5

LLI Sample # SW 6164651
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:09

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-109 SDG#: DX022-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 08:57	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164652
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-122 SDG#: DX022-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164652
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-122 SDG#: DX022-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0224 JBQ	0.0164	1.06	1
11031	12378-PeCDD	40321-76-4	0.121 JBQ	0.0324	5.29	1
11031	123478-HxCDD	39227-28-6	0.0834 JBQ	0.0331	5.29	1
11031	123678-HxCDD	57653-85-7	0.422 JBQ	0.0341	5.29	1
11031	123789-HxCDD	19408-74-3	0.741 JB	0.0341	5.29	1
11031	1234678-HpCDD	35822-46-9	2.25 JB	0.0417	5.29	1
11031	OCDD	3268-87-9	22.4 B	0.0395	10.6	1
11031	2378-TCDF	51207-31-9	0.0494 JB	0.0270	1.06	1
11031	12378-PeCDF	57117-41-6	0.344 JBQ	0.0137	5.29	1
11031	23478-PeCDF	57117-31-4	0.255 JB	0.0133	5.29	1
11031	123478-HxCDF	70648-26-9	0.217 JB	0.0259	5.29	1
11031	123678-HxCDF	57117-44-9	0.209 JB	0.0230	5.29	1
11031	123789-HxCDF	72918-21-9	0.527 JBQ	0.0288	5.29	1
11031	234678-HxCDF	60851-34-5	0.278 JB	0.0248	5.29	1
11031	1234678-HpCDF	67562-39-4	1.17 JB	0.0196	5.29	1
11031	1234789-HpCDF	55673-89-7	0.205 JB	0.0312	5.29	1
11031	OCDF	39001-02-0	1.61 JB	0.0406	10.6	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-122-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164652
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-122 SDG#: DX022-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-122-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SS-0.0-0.5

LLI Sample # SW 6164652
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:40

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-122 SDG#: DX022-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 09:54	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164653
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-121 SDG#: DX022-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164653
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-121 SDG#: DX022-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0222	JBQ	0.0171	1.06	1
11031	12378-PeCDD	40321-76-4	0.0304	U	0.0304	5.30	1
11031	123478-HxCDD	39227-28-6	0.0306	U	0.0306	5.30	1
11031	123678-HxCDD	57653-85-7	0.314	JBQ	0.0321	5.30	1
11031	123789-HxCDD	19408-74-3	0.438	JB	0.0315	5.30	1
11031	1234678-HpCDD	35822-46-9	2.20	JB	0.0480	5.30	1
11031	OCDD	3268-87-9	26.8	B	0.0446	10.6	1
11031	2378-TCDF	51207-31-9	0.0330	U	0.0330	1.06	1
11031	12378-PeCDF	57117-41-6	0.701	JBQ	0.0137	5.30	1
11031	23478-PeCDF	57117-31-4	0.201	JBQ	0.0151	5.30	1
11031	123478-HxCDF	70648-26-9	0.181	JBQ	0.0266	5.30	1
11031	123678-HxCDF	57117-44-9	0.176	JB	0.0214	5.30	1
11031	123789-HxCDF	72918-21-9	0.330	JB	0.0316	5.30	1
11031	234678-HxCDF	60851-34-5	0.160	JB	0.0255	5.30	1
11031	1234678-HpCDF	67562-39-4	0.826	JB	0.0178	5.30	1
11031	1234789-HpCDF	55673-89-7	0.124	JBQ	0.0334	5.30	1
11031	OCDF	39001-02-0	1.64	JB	0.0456	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	102	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164653
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-121 SDG#: DX022-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SS-0.0-0.5

LLI Sample # SW 6164653
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:15

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-121 SDG#: DX022-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 10:50	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164654
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-054 SDG#: DX022-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164654
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-054 SDG#: DX022-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0735	JBQ	0.0319	1.07	1
11031	12378-PeCDD	40321-76-4	0.435	JBQ	0.0639	5.33	1
11031	123478-HxCDD	39227-28-6	1.08	JBQ	0.0449	5.33	1
11031	123678-HxCDD	57653-85-7	4.69	JB	0.0465	5.33	1
11031	123789-HxCDD	19408-74-3	1.98	JB	0.0447	5.33	1
11031	1234678-HpCDD	35822-46-9	143	B	0.148	5.33	1
11031	OCDD	3268-87-9	1,600	B	0.120	10.7	1
11031	2378-TCDF	51207-31-9	0.0546	JB	0.0353	1.07	1
11031	12378-PeCDF	57117-41-6	0.330	JB	0.0191	5.33	1
11031	23478-PeCDF	57117-31-4	0.367	JB	0.0179	5.33	1
11031	123478-HxCDF	70648-26-9	0.505	JBQ	0.0362	5.33	1
11031	123678-HxCDF	57117-44-9	0.642	JB	0.0332	5.33	1
11031	123789-HxCDF	72918-21-9	0.274	JB	0.0391	5.33	1
11031	234678-HxCDF	60851-34-5	0.856	JB	0.0353	5.33	1
11031	1234678-HpCDF	67562-39-4	13.7	B	0.0308	5.33	1
11031	1234789-HpCDF	55673-89-7	1.32	JB	0.0465	5.33	1
11031	OCDF	39001-02-0	38.0	B	0.0474	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-054-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164654
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-054 SDG#: DX022-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-054-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-054-SA5B-SS-0.0-0.5

LLI Sample # SW 6164654
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:21

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-054 SDG#: DX022-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 11:47	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164655
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-105 SDG#: DX022-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164655
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-105 SDG#: DX022-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0295	U	0.0295	1.04	1
11031	12378-PeCDD	40321-76-4	0.412	JBQ	0.0712	5.22	1
11031	123478-HxCDD	39227-28-6	0.795	JB	0.0452	5.22	1
11031	123678-HxCDD	57653-85-7	4.14	JB	0.0474	5.22	1
11031	123789-HxCDD	19408-74-3	1.63	JBQ	0.0444	5.22	1
11031	1234678-HpCDD	35822-46-9	114	B	0.111	5.22	1
11031	OCDD	3268-87-9	1,230	B	0.110	10.4	1
11031	2378-TCDF	51207-31-9	0.0802	JBQ	0.0366	1.04	1
11031	12378-PeCDF	57117-41-6	0.424	JB	0.0211	5.22	1
11031	23478-PeCDF	57117-31-4	0.148	JBQ	0.0206	5.22	1
11031	123478-HxCDF	70648-26-9	0.400	JB	0.0350	5.22	1
11031	123678-HxCDF	57117-44-9	0.588	JB	0.0310	5.22	1
11031	123789-HxCDF	72918-21-9	0.282	JB	0.0376	5.22	1
11031	234678-HxCDF	60851-34-5	0.755	JB	0.0338	5.22	1
11031	1234678-HpCDF	67562-39-4	12.0	B	0.0326	5.22	1
11031	1234789-HpCDF	55673-89-7	1.15	JB	0.0461	5.22	1
11031	OCDF	39001-02-0	29.3	B	0.0493	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	66	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-105-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164655
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-105 SDG#: DX022-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-105-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-105-SA5B-SS-0.0-0.5

LLI Sample # SW 6164655
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:35

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-105 SDG#: DX022-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 12:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164656
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-098 SDG#: DX022-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	3.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164656
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-098 SDG#: DX022-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0639	JBQ	0.0230	1.03	1
11031	12378-PeCDD	40321-76-4	0.214	JBQ	0.0469	5.17	1
11031	123478-HxCDD	39227-28-6	0.364	JB	0.0274	5.17	1
11031	123678-HxCDD	57653-85-7	2.00	JB	0.0288	5.17	1
11031	123789-HxCDD	19408-74-3	0.922	JB	0.0282	5.17	1
11031	1234678-HpCDD	35822-46-9	60.4	B	0.0733	5.17	1
11031	OCDD	3268-87-9	598	B	0.0793	10.3	1
11031	2378-TCDF	51207-31-9	0.0287	U	0.0287	1.03	1
11031	12378-PeCDF	57117-41-6	0.287	JBQ	0.0150	5.17	1
11031	23478-PeCDF	57117-31-4	0.147	JB	0.0150	5.17	1
11031	123478-HxCDF	70648-26-9	0.239	JB	0.0199	5.17	1
11031	123678-HxCDF	57117-44-9	0.305	JB	0.0177	5.17	1
11031	123789-HxCDF	72918-21-9	0.151	JB	0.0236	5.17	1
11031	234678-HxCDF	60851-34-5	0.421	JBQ	0.0192	5.17	1
11031	1234678-HpCDF	67562-39-4	5.52	B	0.0222	5.17	1
11031	1234789-HpCDF	55673-89-7	0.578	JB	0.0347	5.17	1
11031	OCDF	39001-02-0	12.9	B	0.0389	10.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-098-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164656
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-098 SDG#: DX022-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-098-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-098-SA5B-SS-0.0-0.5

LLI Sample # SW 6164656
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:43

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-098 SDG#: DX022-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 13:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401A	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164657
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-142 SDG#: DX022-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164657
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-142 SDG#: DX022-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0267 JBQ	0.0214	1.07	1
11031	12378-PeCDD	40321-76-4	0.0512 JBQ	0.0297	5.33	1
11031	123478-HxCDD	39227-28-6	0.0550 JBQ	0.0253	5.33	1
11031	123678-HxCDD	57653-85-7	0.117 JB	0.0264	5.33	1
11031	123789-HxCDD	19408-74-3	0.0982 JB	0.0260	5.33	1
11031	1234678-HpCDD	35822-46-9	3.01 JB	0.0383	5.33	1
11031	OCDD	3268-87-9	31.3 B	0.0432	10.7	1
11031	2378-TCDF	51207-31-9	0.0183 U	0.0183	1.07	1
11031	12378-PeCDF	57117-41-6	0.185 JBQ	0.0107	5.33	1
11031	23478-PeCDF	57117-31-4	0.0547 JBQ	0.0116	5.33	1
11031	123478-HxCDF	70648-26-9	0.0920 JBQ	0.0216	5.33	1
11031	123678-HxCDF	57117-44-9	0.0568 JBQ	0.0176	5.33	1
11031	123789-HxCDF	72918-21-9	0.0673 JB	0.0275	5.33	1
11031	234678-HxCDF	60851-34-5	0.0798 JB	0.0201	5.33	1
11031	1234678-HpCDF	67562-39-4	0.707 JB	0.0156	5.33	1
11031	1234789-HpCDF	55673-89-7	0.103 JB	0.0349	5.33	1
11031	OCDF	39001-02-0	1.67 JBQ	0.0502	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	57	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	58	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	52	26 - 138
13C12-OCDF	41	17 - 157
13C12-1278-TCDD (CRS)	72	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-142-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164657
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-142 SDG#: DX022-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-142-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-142-SA5B-SS-0.0-0.5

LLI Sample # SW 6164657
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:04

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-142 SDG#: DX022-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 14:37	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164658
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-143 SDG#: DX022-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	3.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164658
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-143 SDG#: DX022-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0197 U	0.0197	1.04	1
11031	12378-PeCDD	40321-76-4	0.0773 JBQ	0.0292	5.19	1
11031	123478-HxCDD	39227-28-6	0.0525 JBQ	0.0273	5.19	1
11031	123678-HxCDD	57653-85-7	0.214 JBQ	0.0281	5.19	1
11031	123789-HxCDD	19408-74-3	0.324 JB	0.0271	5.19	1
11031	1234678-HpCDD	35822-46-9	3.24 JB	0.0371	5.19	1
11031	OCDD	3268-87-9	29.2 B	0.0445	10.4	1
11031	2378-TCDF	51207-31-9	0.0190 U	0.0190	1.04	1
11031	12378-PeCDF	57117-41-6	0.0737 JBQ	0.0101	5.19	1
11031	23478-PeCDF	57117-31-4	0.0574 JBQ	0.0104	5.19	1
11031	123478-HxCDF	70648-26-9	0.0609 JBQ	0.0189	5.19	1
11031	123678-HxCDF	57117-44-9	0.0503 JBQ	0.0155	5.19	1
11031	123789-HxCDF	72918-21-9	0.201 JB	0.0232	5.19	1
11031	234678-HxCDF	60851-34-5	0.0658 JB	0.0187	5.19	1
11031	1234678-HpCDF	67562-39-4	0.645 JB	0.0135	5.19	1
11031	1234789-HpCDF	55673-89-7	0.0660 JBQ	0.0294	5.19	1
11031	OCDF	39001-02-0	1.39 JB	0.0402	10.4	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	63	29 - 147
13C12-1234678-HpCDF	102	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	49	17 - 157
13C12-1278-TCDD (CRS)	72	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164658
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-143 SDG#: DX022-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-143-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-143-SA5B-SS-0.0-0.5

LLI Sample # SW 6164658
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:15

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-143 SDG#: DX022-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 15:33	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164659
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-123 SDG#: DX022-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164659
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-123 SDG#: DX022-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.159	JB	0.0233	1.06	1
11031	12378-PeCDD	40321-76-4	1.07	JB	0.0597	5.32	1
11031	123478-HxCDD	39227-28-6	2.46	JB	0.0419	5.32	1
11031	123678-HxCDD	57653-85-7	6.79	B	0.0432	5.32	1
11031	123789-HxCDD	19408-74-3	4.83	JB	0.0430	5.32	1
11031	1234678-HpCDD	35822-46-9	201	B	0.147	5.32	1
11031	OCDD	3268-87-9	1,920	B	0.0904	10.6	1
11031	2378-TCDF	51207-31-9	1.29	B	0.0858	1.06	1
11031	12378-PeCDF	57117-41-6	1.00	JB	0.0278	5.32	1
11031	23478-PeCDF	57117-31-4	2.23	JB	0.0282	5.32	1
11031	123478-HxCDF	70648-26-9	1.70	JB	0.0367	5.32	1
11031	123678-HxCDF	57117-44-9	1.84	JB	0.0322	5.32	1
11031	123789-HxCDF	72918-21-9	0.647	JB	0.0424	5.32	1
11031	234678-HxCDF	60851-34-5	2.16	JB	0.0357	5.32	1
11031	1234678-HpCDF	67562-39-4	37.2	B	0.0370	5.32	1
11031	1234789-HpCDF	55673-89-7	2.94	JB	0.0639	5.32	1
11031	OCDF	39001-02-0	114	B	0.0383	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	54	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164659
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-123 SDG#: DX022-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-123-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-123-SA5B-SS-0.0-0.5

LLI Sample # SW 6164659
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:40

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-123 SDG#: DX022-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 16:30	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164660
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-124 SDG#: DX022-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164660
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-124 SDG#: DX022-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0882	JBQ	0.0194	1.05	1
11031	12378-PeCDD	40321-76-4	0.542	JB	0.0496	5.27	1
11031	123478-HxCDD	39227-28-6	1.06	JB	0.0285	5.27	1
11031	123678-HxCDD	57653-85-7	2.93	JB	0.0295	5.27	1
11031	123789-HxCDD	19408-74-3	2.43	JB	0.0293	5.27	1
11031	1234678-HpCDD	35822-46-9	93.4	B	0.0926	5.27	1
11031	OCDD	3268-87-9	1,120	B	0.0810	10.5	1
11031	2378-TCDF	51207-31-9	0.373	JBQ	0.0449	1.05	1
11031	12378-PeCDF	57117-41-6	0.841	JB	0.0201	5.27	1
11031	23478-PeCDF	57117-31-4	0.831	JBQ	0.0195	5.27	1
11031	123478-HxCDF	70648-26-9	0.862	JB	0.0261	5.27	1
11031	123678-HxCDF	57117-44-9	0.759	JB	0.0238	5.27	1
11031	123789-HxCDF	72918-21-9	0.773	JBQ	0.0300	5.27	1
11031	234678-HxCDF	60851-34-5	0.840	JB	0.0255	5.27	1
11031	1234678-HpCDF	67562-39-4	14.3	B	0.0249	5.27	1
11031	1234789-HpCDF	55673-89-7	1.05	JB	0.0360	5.27	1
11031	OCDF	39001-02-0	34.2	B	0.0252	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	69	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-124-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164660
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-124 SDG#: DX022-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-124-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-124-SA5B-SS-0.0-0.5

LLI Sample # SW 6164660
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:00

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-124 SDG#: DX022-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 17:26	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164661
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-309 SDG#: DX022-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164661
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-309 SDG#: DX022-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0594	JBQ	0.0131	1.04	1
11031	12378-PeCDD	40321-76-4	0.324	JB	0.0285	5.21	1
11031	123478-HxCDD	39227-28-6	0.585	JBQ	0.0242	5.21	1
11031	123678-HxCDD	57653-85-7	1.50	JB	0.0246	5.21	1
11031	123789-HxCDD	19408-74-3	1.11	JB	0.0241	5.21	1
11031	1234678-HpCDD	35822-46-9	50.0	B	0.0672	5.21	1
11031	OCDD	3268-87-9	626	B	0.0503	10.4	1
11031	2378-TCDF	51207-31-9	0.0495	JB	0.0193	1.04	1
11031	12378-PeCDF	57117-41-6	0.222	JB	0.0126	5.21	1
11031	23478-PeCDF	57117-31-4	0.253	JB	0.0122	5.21	1
11031	123478-HxCDF	70648-26-9	0.701	JB	0.0215	5.21	1
11031	123678-HxCDF	57117-44-9	0.470	JBQ	0.0194	5.21	1
11031	123789-HxCDF	72918-21-9	0.279	JB	0.0222	5.21	1
11031	234678-HxCDF	60851-34-5	0.546	JB	0.0206	5.21	1
11031	1234678-HpCDF	67562-39-4	7.73	B	0.0188	5.21	1
11031	1234789-HpCDF	55673-89-7	0.814	JB	0.0231	5.21	1
11031	OCDF	39001-02-0	15.1	B	0.0195	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	82	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164661
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-309 SDG#: DX022-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-309-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-309-SA5B-SS-0.0-0.5

LLI Sample # SW 6164661
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:25

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-309 SDG#: DX022-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 21:26	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164662
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-311 SDG#: DX022-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	7.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164662
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-311 SDG#: DX022-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.331	JB	0.0229	1.08	1
11031	12378-PeCDD	40321-76-4	2.91	JB	0.0556	5.42	1
11031	123478-HxCDD	39227-28-6	5.93	B	0.0495	5.42	1
11031	123678-HxCDD	57653-85-7	12.9	B	0.0509	5.42	1
11031	123789-HxCDD	19408-74-3	11.7	B	0.0499	5.42	1
11031	1234678-HpCDD	35822-46-9	415	B	0.162	5.42	1
11031	OCDD	3268-87-9	5,310	EB	0.140	10.8	1
11031	2378-TCDF	51207-31-9	0.279	JB	0.0348	1.08	1
11031	12378-PeCDF	57117-41-6	0.615	JB	0.0180	5.42	1
11031	23478-PeCDF	57117-31-4	1.00	JB	0.0164	5.42	1
11031	123478-HxCDF	70648-26-9	3.73	JB	0.0339	5.42	1
11031	123678-HxCDF	57117-44-9	3.22	JB	0.0326	5.42	1
11031	123789-HxCDF	72918-21-9	1.29	JB	0.0356	5.42	1
11031	234678-HxCDF	60851-34-5	4.52	JB	0.0338	5.42	1
11031	1234678-HpCDF	67562-39-4	67.1	B	0.0398	5.42	1
11031	1234789-HpCDF	55673-89-7	5.74	B	0.0492	5.42	1
11031	OCDF	39001-02-0	147	B	0.0433	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	66	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164662
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-311 SDG#: DX022-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-311-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-311-SA5B-SS-0.0-0.5

LLI Sample # SW 6164662
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-311 SDG#: DX022-17

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 22:22	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164663
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-310 SDG#: DX022-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164663
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-310 SDG#: DX022-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0262	JBQ	0.0218	1.05	1
11031	12378-PeCDD	40321-76-4	0.158	JBQ	0.0492	5.27	1
11031	123478-HxCDD	39227-28-6	0.317	JBQ	0.0403	5.27	1
11031	123678-HxCDD	57653-85-7	1.07	JB	0.0427	5.27	1
11031	123789-HxCDD	19408-74-3	0.759	JB	0.0432	5.27	1
11031	1234678-HpCDD	35822-46-9	31.5	B	0.0829	5.27	1
11031	OCDD	3268-87-9	396	B	0.0902	10.5	1
11031	2378-TCDF	51207-31-9	0.159	JBQ	0.0436	1.05	1
11031	12378-PeCDF	57117-41-6	0.355	JB	0.0227	5.27	1
11031	23478-PeCDF	57117-31-4	0.299	JB	0.0216	5.27	1
11031	123478-HxCDF	70648-26-9	0.303	JB	0.0342	5.27	1
11031	123678-HxCDF	57117-44-9	0.268	JB	0.0327	5.27	1
11031	123789-HxCDF	72918-21-9	0.260	JB	0.0354	5.27	1
11031	234678-HxCDF	60851-34-5	0.364	JB	0.0346	5.27	1
11031	1234678-HpCDF	67562-39-4	4.16	JB	0.0307	5.27	1
11031	1234789-HpCDF	55673-89-7	0.450	JBQ	0.0392	5.27	1
11031	OCDF	39001-02-0	9.13	JB	0.0404	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	61	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	64	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164663
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-310 SDG#: DX022-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-310-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-310-SA5B-SS-0.0-0.5

LLI Sample # SW 6164663
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-310 SDG#: DX022-18

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/18/2011 23:19	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164664
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-312 SDG#: DX022-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164664
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-312 SDG#: DX022-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0561	JB	0.0169	1.05	1
11031	12378-PeCDD	40321-76-4	0.462	JB	0.0396	5.26	1
11031	123478-HxCDD	39227-28-6	1.03	JB	0.0309	5.26	1
11031	123678-HxCDD	57653-85-7	2.12	JB	0.0321	5.26	1
11031	123789-HxCDD	19408-74-3	1.93	JB	0.0322	5.26	1
11031	1234678-HpCDD	35822-46-9	67.2	B	0.0824	5.26	1
11031	OCDD	3268-87-9	820	B	0.0831	10.5	1
11031	2378-TCDF	51207-31-9	0.0388	JB	0.0239	1.05	1
11031	12378-PeCDF	57117-41-6	0.212	JB	0.0160	5.26	1
11031	23478-PeCDF	57117-31-4	0.286	JBQ	0.0151	5.26	1
11031	123478-HxCDF	70648-26-9	0.582	JB	0.0298	5.26	1
11031	123678-HxCDF	57117-44-9	0.579	JB	0.0281	5.26	1
11031	123789-HxCDF	72918-21-9	0.226	JBQ	0.0343	5.26	1
11031	234678-HxCDF	60851-34-5	0.785	JB	0.0286	5.26	1
11031	1234678-HpCDF	67562-39-4	11.3	B	0.0281	5.26	1
11031	1234789-HpCDF	55673-89-7	0.851	JB	0.0382	5.26	1
11031	OCDF	39001-02-0	23.6	B	0.0409	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	81	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	84	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-312-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164664
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-312 SDG#: DX022-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-312-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-312-SA5B-SS-0.0-0.5

LLI Sample # SW 6164664
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:27

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-312 SDG#: DX022-19

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/19/2011 00:15	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164665
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-025 SDG#: DX022-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	10.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164665
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-025 SDG#: DX022-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0310	U	0.0310	1.12	1
11031	12378-PeCDD	40321-76-4	0.156	JBQ	0.0435	5.58	1
11031	123478-HxCDD	39227-28-6	0.106	JB	0.0309	5.58	1
11031	123678-HxCDD	57653-85-7	0.324	JB	0.0326	5.58	1
11031	123789-HxCDD	19408-74-3	0.238	JBQ	0.0328	5.58	1
11031	1234678-HpCDD	35822-46-9	4.55	JB	0.0404	5.58	1
11031	OCDD	3268-87-9	31.4	B	0.0445	11.2	1
11031	2378-TCDF	51207-31-9	0.381	JBQ	0.0598	1.12	1
11031	12378-PeCDF	57117-41-6	0.291	JB	0.0230	5.58	1
11031	23478-PeCDF	57117-31-4	0.690	JB	0.0227	5.58	1
11031	123478-HxCDF	70648-26-9	0.219	JB	0.0273	5.58	1
11031	123678-HxCDF	57117-44-9	0.196	JB	0.0244	5.58	1
11031	123789-HxCDF	72918-21-9	0.0589	JB	0.0310	5.58	1
11031	234678-HxCDF	60851-34-5	0.243	JB	0.0262	5.58	1
11031	1234678-HpCDF	67562-39-4	1.34	JB	0.0290	5.58	1
11031	1234789-HpCDF	55673-89-7	0.142	JBQ	0.0444	5.58	1
11031	OCDF	39001-02-0	2.27	JB	0.0372	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-025-SIV-SD-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164665
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-025 SDG#: DX022-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-025-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-025-SIV-SD-0.0-0.5

LLI Sample # SW 6164665
LLI Group # 1225471
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:44

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 18:02

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-025 SDG#: DX022-20*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11004001	01/19/2011 01:12	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11004001	01/04/2011 12:30	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10355162401B	12/21/2010 17:32	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225471
Reported: 02/02/11 at 06:02 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10355162401A	Sample number(s): 6164644-6164656								
28a Moisture Content by 160.3					100		80-120		
Batch number: 10355162401B	Sample number(s): 6164657-6164665								
28a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11004001	Sample number(s): 6164644-6164665								
2378-TCDD	0.0349 J	0.0141	1.00	ng/kg	107		67-158		
12378-PeCDD	0.244 J	0.0285	5.00	ng/kg	108		70-142		
123478-HxCDD	0.206 J	0.0286	5.00	ng/kg	108		70-164		
123678-HxCDD	0.259 J	0.0297	5.00	ng/kg	106		76-134		
123789-HxCDD	0.247 J	0.0290	5.00	ng/kg	107		64-162		
1234678-HpCDD	0.682 J	0.0437	5.00	ng/kg	107		70-140		
OCDD	1.49 J	0.0411	10.0	ng/kg	106		78-144		
2378-TCDF	0.0662 J	0.0140	1.00	ng/kg	118		75-158		
12378-PeCDF	0.242 J	0.0106	5.00	ng/kg	107		80-134		
23478-PeCDF	0.330 J	0.0109	5.00	ng/kg	107		68-160		
123478-HxCDF	0.370 J	0.0229	5.00	ng/kg	101		72-134		
123678-HxCDF	0.338 J	0.0196	5.00	ng/kg	100		84-130		
123789-HxCDF	0.320 J	0.0276	5.00	ng/kg	103		78-130		
234678-HxCDF	0.498 J	0.0219	5.00	ng/kg	102		70-156		
1234678-HpCDF	1.19 J	0.0206	5.00	ng/kg	102		82-122		
1234789-HpCDF	0.343 J	0.0351	5.00	ng/kg	103		78-138		
OCDF	1.16 J	0.0424	10.0	ng/kg	106		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10355162401A	Sample number(s): 6164644-6164656 BKG: P164622								
28a Moisture Content by 160.3						4.1	4.0	1	20
Batch number: 10355162401B	Sample number(s): 6164657-6164665 BKG: P164635								
28a Moisture Content by 160.3						6.2	6.0	3	20
Batch number: 11004001	Sample number(s): 6164644-6164665 UNSPK: 6164645								
2378-TCDD	108	108	67-158	0	25				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225471
Reported: 02/02/11 at 06:02 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
12378-PeCDD	108	108	70-142	0	25				
123478-HxCDD	111	110	70-164	1	25				
123678-HxCDD	108	108	76-134	0	25				
123789-HxCDD	110	109	64-162	0	25				
1234678-HpCDD	110	107	70-140	2	25				
OCDD	114	92	78-144	11	25				
2378-TCDF	108	112	75-158	3	25				
12378-PeCDF	108	110	80-134	1	25				
23478-PeCDF	107	109	68-160	2	25				
123478-HxCDF	103	104	72-134	1	25				
123678-HxCDF	102	104	84-130	1	25				
123789-HxCDF	105	105	78-130	1	25				
234678-HxCDF	104	105	70-156	1	25				
1234678-HpCDF	105	105	82-122	1	25				
1234789-HpCDF	104	105	78-138	1	25				
OCDF	108	105	63-170	3	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11004001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6164644	66	76	79	83	79	75
6164645	68	81	80	86	80	75
6164646	71	82	81	81	80	82
6164647	70	82	83	86	81	78
6164648	67	82	83	86	81	78
6164649	66	78	75	84	76	71
6164650	66	78	82	83	79	77
6164651	72	78	79	86	80	80
6164652	70	81	80	85	81	79
6164653	65	73	73	85	73	68
6164654	70	82	83	85	84	82
6164655	70	78	78	81	79	78
6164656	63	75	75	81	75	72
6164657	57	68	66	77	67	58
6164658	59	69	72	82	70	63
6164659	63	72	75	80	74	72
6164660	66	77	80	83	79	80
6164661	71	82	83	85	82	86
6164662	66	80	80	79	79	81
6164663	71	77	80	79	77	79
6164664	72	85	84	85	84	82
6164665	66	76	77	84	77	75
Blank	70	78	73	82	74	70
MS	71	82	81	81	80	82

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225471
Reported: 02/02/11 at 06:02 PM

Surrogate Quality Control

MSD	70	82	83	86	81	78
OPR	68	71	70	81	71	62
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6164644	91	76	70	77	71	76
6164645	96	69	57	78	76	78
6164646	81	78	67	75	75	74
6164647	89	73	63	82	77	77
6164648	90	69	57	81	76	78
6164649	97	70	63	75	74	75
6164650	82	71	59	77	71	74
6164651	90	70	57	80	74	77
6164652	94	72	61	79	76	78
6164653	102	64	56	76	71	75
6164654	86	72	59	79	75	79
6164655	85	75	66	78	74	76
6164656	90	69	61	73	71	73
6164657	95	52	41	72	67	69
6164658	102	59	49	72	67	72
6164659	89	64	54	79	70	75
6164660	88	75	69	76	72	76
6164661	84	81	75	80	77	79
6164662	78	77	66	75	72	75
6164663	76	74	64	75	71	75
6164664	82	74	60	80	78	81
6164665	87	70	61	75	73	77
Blank	95	67	59	83	76	76
MS	81	78	67	75	75	74
MSD	89	73	63	82	77	77
OPR	95	58	47	83	73	77
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6164644	74	73	75	71	73	79
6164645	75	76	76	69	75	86
6164646	74	74	74	66	79	84
6164647	78	76	75	69	77	85
6164648	77	75	74	67	76	84
6164649	75	76	78	72	71	85
6164650	73	71	70	61	75	79
6164651	75	77	74	68	78	85
6164652	76	77	77	71	74	84
6164653	73	73	73	69	68	84
6164654	76	77	74	66	78	79
6164655	73	74	73	67	74	80
6164656	74	72	71	66	70	80
6164657	67	67	68	60	63	77
6164658	69	69	72	66	65	76
6164659	72	71	70	65	70	78
6164660	75	75	73	70	75	78
6164661	78	77	77	73	79	83

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225471
Reported: 02/02/11 at 06:02 PM

Surrogate Quality Control

6164662	73	72	71	62	76	77
6164663	73	72	68	61	75	76
6164664	80	78	75	64	81	83
6164665	75	74	74	66	72	80
Blank	76	75	75	70	71	85
MS	74	74	74	66	79	84
MSD	78	76	75	69	77	85
OPR	76	75	73	65	68	82
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1225471 61644644-65

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-EPH EPA 8015B Mod.	*Metals EPA 6010/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide, EPA 9012B	**pH EPA 9045C	**Tarphem/A EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-002-SA5C-SB-4.0-5.0	12.14.10	0942	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-002-SA5C-SB-9.0-10.0	12.14.10	0950	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
TB-121410	12.14.10	0800	water	HCl	2-40 mL VOA vials	X	X		X																				trip blank
EB02-SA5B-121410	12.14.10	1230	water	none	6-1 liter ambers			X						X	X			X	X										rinsate
EB02-SA5B-121410	12.14.10	1230	water	none	1-500 ml poly							X	X			X													rinsate
EB02-SA5B-121410	12.14.10	1230	water	HNO3	1-500 ml poly						X																		rinsate
EB02-SA5B-121410	12.14.10	1230	water	HCl	6-40 mL amber VOA vials	X	X		X																				rinsate
SL-002-SA5C-SB-9.5	12.14.10	0948	soil	none	5 Encore Samplers	X	X		X																				
SL-002-SA5C-SB-4.5	12.14.10	0938	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-4.5	12.14.10	1104	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-9.5	12.14.10	1115	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-9.0-10.0	12.14.10	1118	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-004-SA5C-SB-4.0-5.0	12.14.10	1111	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-140-SA5C-SB-3.0-4.0	12.14.10	1428	soil	none	2 x 16 oz. jars			X			X	X	X	X	X	X													
SL-140-SA5C-SB-3.5	12.14.10	1425	soil	none	5 Encore Samplers	X	X																						
DUP05-SA5B-QC-121410	12.14.10	0850	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									DUP
SL-120-SA5B-SS-0.0-0.5MS	12.14.10	0847	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X			X	X									MS/MSD
SL-108-SA5B-SS-0.0-0.5	12.14.10	0855	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-119-SA5B-SS-0.0-0.5	12.14.10	0830	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-240-SA5B-SS-0.0-0.5	12.14.10	0933	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-109-SA5B-SS-0.0-0.5	12.14.10	0909	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-122-SA5B-SS-0.0-0.5	12.14.10	0940	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-121-SA5B-SS-0.0-0.5	12.14.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-054-SA5B-SS-0.0-0.5	12.14.10	0921	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-105-SA5B-SS-0.0-0.5	12.14.10	0835	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-098-SA5B-SS-0.0-0.5	12.14.10	1043	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X	X									
SL-142-SA5B-SS-0.0-0.5	12.14.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-143-SA5B-SS-0.0-0.5	12.14.10	1115	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-123-SA5B-SS-0.0-0.5	12.14.10	1040	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-124-SA5B-SS-0.0-0.5	12.14.10	1100	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-309-SA5B-SS-0.0-0.5	12.14.10	1325	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-311-SA5B-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-310-SA5B-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-312-SA5B-SS-0.0-0.5	12.14.10	1427	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-025-SIV-SD-0.0-0.5	12.14.10	1244	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-024-SIV-SD-0.0-0.5	12.14.10	1116	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X	X									
SED-023-SIV-SD-0.0-0.5	12.14.10	0919	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-022-SIV-SD-0.0-0.5	12.14.10	1008	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-125-SA5B-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-126-SA5B-SS-0.0-0.5	12.14.10	1420	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-129-SA5B-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-128-SA5B-SS-0.0-0.5	12.14.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-027-SIV-SD-0.0-0.5	12.14.10	1559	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-026-SIV-SD-0.0-0.5	12.14.10	1522	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-060-SA5C-SB-10.0-11.0	12.14.10	1618	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-060-SA5C-SB-10.5	12.14.10	1614	soil	none	5 Encore Samplers	X	X		X																				

Relinquished by:*(Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time		Laboratory:
	12.14.10 1700		12/15/10	940	Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time	Airbill No.			No. of coolers = 5
		00732992 Tracking Number 869514317156			

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

January 19, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/15/2010
Group Number: 1225546
SDG: DE039
PO Number: 1203-004-007-AL
Release Number: Tracking #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-002-SA5C-SB-4.0-5.0 Soil	6164941
SL-002-SA5C-SB-9.0-10.0 Soil	6164942
TB-121410 Water	6164943
EB02-SA5B-121410 Water	6164944
SL-004-SA5C-SB-9.0-10.0 Soil	6164945
SL-004-SA5C-SB-4.0-5.0 Soil	6164946
SL-140-SA5C-SB-3.0-4.0 Soil	6164947
SED-024-SIV-SD-0.0-0.5 Sediment	6164948
SED-023-SIV-SD-0.0-0.5 Sediment	6164949
SED-022-SIV-SD-0.0-0.5 Sediment	6164950
SL-125-SA5B-SS-0.0-0.5 Soil	6164951
SL-126-SA5B-SS-0.0-0.5 Soil	6164952
SL-129-SA5B-SS-0.0-0.5 Soil	6164953
SL-128-SA5B-SS-0.0-0.5 Soil	6164954
SED-027-SIV-SD-0.0-0.5 Sediment	6164955
SED-026-SIV-SD-0.0-0.5 Sediment	6164956
SL-060-SA5C-SB-10.0-11.0 Soil	6164957

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO CDM Federal Services Program Attn: Todd Burgesser

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

Robert Heisey

Robert Heisey
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.1	U	7.1	8.5		0.99
06192	Benzene	71-43-2	0.11	U	0.11	4.2		0.99
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.2		0.99
06192	Bromochloromethane	74-97-5	0.35	U	0.35	4.2		0.99
06192	Bromodichloromethane	75-27-4	0.09	U	0.09	4.2		0.99
06192	Bromoform	75-25-2	0.42	U	0.42	4.2		0.99
06192	Bromomethane	74-83-9	0.27	U	0.27	4.2		0.99
06192	2-Butanone	78-93-3	1.3	U	1.3	8.5		0.99
06192	n-Butylbenzene	104-51-8	0.13	U	0.13	4.2		0.99
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.2		0.99
06192	tert-Butylbenzene	98-06-6	0.17	U	0.17	4.2		0.99
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.2		0.99
06192	Chlorobenzene	108-90-7	0.12	U	0.12	4.2		0.99
06192	Chloroethane	75-00-3	0.14	U	0.14	4.2		0.99
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.32	U	0.32	4.2		0.99
06192	Chloroform	67-66-3	0.13	U	0.13	4.2		0.99
06192	Chloromethane	74-87-3	0.35	U	0.35	4.2		0.99
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.2		0.99
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.2		0.99
06192	Chlorotrifluoroethene	79-38-9	0.53	U	0.53	5.3		0.99
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.74	U	0.74	4.2		0.99
06192	Dibromochloromethane	124-48-1	0.21	U	0.21	4.2		0.99
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.2		0.99
06192	Dibromomethane	74-95-3	0.25	U	0.25	4.2		0.99
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.2		0.99
06192	1,3-Dichlorobenzene	541-73-1	0.13	U	0.13	4.2		0.99
06192	1,4-Dichlorobenzene	106-46-7	0.17	U	0.17	4.2		0.99
06192	Dichlorodifluoromethane	75-71-8	0.13	U	0.13	4.2		0.99
06192	1,1-Dichloroethane	75-34-3	0.11	U	0.11	4.2		0.99
06192	1,2-Dichloroethane	107-06-2	0.16	U	0.16	4.2		0.99
06192	1,1-Dichloroethene	75-35-4	0.41	U	0.41	4.2		0.99
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.2		0.99
06192	trans-1,2-Dichloroethene	156-60-5	0.13	U	0.13	4.2		0.99
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.2		0.99
06192	1,3-Dichloropropane	142-28-9	0.09	U	0.09	4.2		0.99
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.2		0.99
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.2		0.99
06192	cis-1,3-Dichloropropene	10061-01-5	0.17	U	0.17	4.2		0.99
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.2		0.99
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.2		0.99
06192	Freon 113	76-13-1	0.12	U	0.12	4.2		0.99
06192	Freon 133a	75-88-7	0.53	U	0.53	5.3		0.99
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.2		0.99
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.5		0.99
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.2		0.99
06192	p-Isopropyltoluene	99-87-6	0.12	U	0.12	4.2		0.99
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22	U	0.22	4.2		0.99
06192	4-Methyl-2-pentanone	108-10-1	0.41	U	0.41	8.5		0.99
06192	Methylene Chloride	75-09-2	1.2	J	0.25	4.2		0.99
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.2		0.99

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.11	U	0.11	4.2		0.99
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12	U	0.12	4.2		0.99
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24	U	0.24	4.2		0.99
06192	Tetrachloroethene	127-18-4	0.21	U	0.21	4.2		0.99
06192	Toluene	108-88-3	0.11	J	0.09	4.2		0.99
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.2		0.99
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.2		0.99
06192	1,1,1-Trichloroethane	71-55-6	0.21	U	0.21	4.2		0.99
06192	1,1,2-Trichloroethane	79-00-5	0.29	U	0.29	4.2		0.99
06192	Trichloroethene	79-01-6	0.16	U	0.16	4.2		0.99
06192	Trichlorofluoromethane	75-69-4	0.31	U	0.31	4.2		0.99
06192	1,2,3-Trichloropropane	96-18-4	0.35	U	0.35	4.2		0.99
06192	1,2,4-Trimethylbenzene	95-63-6	0.42	U	0.42	4.2		0.99
06192	1,3,5-Trimethylbenzene	108-67-8	0.11	U	0.11	4.2		0.99
06192	Vinyl Chloride	75-01-4	0.21	U	0.21	4.2		0.99
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.2		0.99
06192	o-Xylene	95-47-6	0.18	U	0.18	4.2		0.99
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.2	U	5.2	15		24.22
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	112		17.8	35.5		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530		1
04688	Benzidine	92-87-5	1,200	U	1,200	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	530		1
04688	Benzyl alcohol	100-51-6	180	U	180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	71	U	71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530		1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	71	U	71	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	530		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.71	U	0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.71	U	0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.71	U	0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.71	U	0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.71	U	0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19		1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19		1
10138	Chrysene	218-01-9	0.36	U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.4	U	6.4	19		1
10138	Fluoranthene	206-44-0	0.71	U	0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U	0.71	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8		1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19		1
10138	Phenanthrene	85-01-8	0.71	U	0.71	1.8		1
10138	Pyrene	129-00-0	0.71	U	0.71	1.8		1
	The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.0		24.61
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	80	U	80	160	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	53	U	53	160	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	320	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	320	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	53	U	53	160	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	53	U	53	160	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	53	U	53	160	10000000	1
10132	HMX	2691-41-0	130	U	130	400	10000000	1
10132	Nitrobenzene	98-95-3	53	U	53	160	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,200	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	160	10000000	1
10132	3-Nitrotoluene	99-08-1	130	U	130	160	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	160	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,200	10000000	1
10132	RDX	121-82-4	67	U	67	160	10000000	1
10132	Tetryl	479-45-8	82	U	82	160	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	1,3,5-Trinitrobenzene	99-35-4	53	U	53	160	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	53	U	53	160	10000000	1
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	640	U	640	1,600		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8		1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8		1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8		1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8		1
10225	PCB-1254	11097-69-1	0.35	U	0.35	1.8		1
10225	PCB-1260	11096-82-5	0.35	U	0.35	1.8		1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.43	U	0.43	1.3		1
10199	EFH (C15-C20)	n.a.	0.43	U	0.43	1.3		1
10199	EFH (C21-C30)	n.a.	0.59	J	0.43	1.3		1
10199	EFH (C30 - C40)	n.a.	0.74	J	0.43	1.3		1
10199	EFH (C8-C11)	n.a.	0.43	U	0.43	1.3		1
	The beginning CCV was outside method criteria. Due to limited extract volume a re-analysis could not be performed; therefore, the data is reported.							
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	530		1
10501	Isopropanol	67-63-0	110	U	110	530		1
10501	Methanol	67-56-1	130	J	110	530		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.3	U	5.3	13		1
08283	Ethylene glycol	107-21-1	5.3	U	5.3	13		1
08283	Propylene glycol	57-55-6	5.3	U	5.3	13		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.6	U	1.6	3.7		1
10318	o-Terphenyl	84-15-1	1.6	U	1.6	3.7		1
10318	p-Terphenyl	92-94-4	1.6	U	1.6	3.7		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,500		5.31	21.1		1
07914	Boron	7440-42-8	2.97	J	0.939	5.28		1
01650	Calcium	7440-70-2	3,200		6.47	21.1		1
01654	Iron	7439-89-6	19,800		4.97	21.1		1
01656	Lithium	7439-93-2	22.8		0.23	2.1		1
01657	Magnesium	7439-95-4	3,970		2.68	10.6		1
06958	Manganese	7439-96-5	315		0.0823	0.528		1
10145	Phosphorus	7723-14-0	330		0.591	10.6		1
01662	Potassium	7440-09-7	2,520		19.0	52.8		1
01667	Sodium	7440-23-5	95.4	J	39.4	106		1
07968	Strontium	7440-24-6	12.3		0.0654	0.528		1
06969	Tin	7440-31-5	2.76	J	1.06	10.6		1
06970	Titanium	7440-32-6	1,220		0.401	1.06		1
10146	Zirconium	7440-67-7	0.887	U	0.887	5.28		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.160	J	0.0633	0.211		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.59		0.0633	0.422		2
06126	Barium	7440-39-3	63.6		0.114	0.422		2
06127	Beryllium	7440-41-7	0.531		0.0169	0.106		2
06128	Cadmium	7440-43-9	0.0891	J	0.0380	0.106		2
06131	Chromium	7440-47-3	14.1		0.127	0.422		2
06132	Cobalt	7440-48-4	5.63		0.0211	0.106		2
06133	Copper	7440-50-8	5.77		0.0697	0.422		2
06135	Lead	7439-92-1	4.71		0.0110	0.211		2
06138	Molybdenum	7439-98-7	0.470		0.0528	0.106		2
06139	Nickel	7440-02-0	8.46		0.106	0.422		2
06141	Selenium	7782-49-2	0.101	J	0.0422	0.422		2
06142	Silver	7440-22-4	0.0148	J	0.0127	0.106		2
06145	Thallium	7440-28-0	0.356		0.0317	0.106		2
06148	Vanadium	7440-62-2	29.5		0.0232	0.106		2
06149	Zinc	7440-66-6	59.4		0.591	3.17		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0031	U	0.0031	0.106		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.85	U	0.85	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.8		0.85	1.6		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3901 SDG#: DE039-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 314.0**		ug/kg		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	32.0		1
	SW-846 7199		mg/kg		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.32	J	0.21	1.1		1
	SW-846 9012B		mg/kg		mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.19	U	0.19	0.53		1
	ASTM D1498		mV		mV	mV	mV	
01821	Oxidation Reduction Potential The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.	n.a.	459		10.0	10.0		1
	SW-846 9045C modified		Std. Units		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.45		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	%	
11624	28a Moisture Content by 160.3 "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.	n.a.	6.2		0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-002-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010	19:47	Laura M Krieger	0.99
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103511AA	12/17/2010	12:01	Jason M Long	24.22
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010	22:22	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034923319	12/15/2010	22:50	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034923319	12/15/2010	22:50	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034923319	12/15/2010	22:20	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10361SLB026	01/05/2011	18:08	Timothy J Trees	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3901 SDG#: DE039-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 11:27	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 18:06	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10361SLB026	12/27/2010 08:15	Joseph S Feister	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34B	12/17/2010 13:36	Elizabeth J Marin	24.61
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:19	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 09:33	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 00:43	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 21:12	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103570006A	12/27/2010 12:25	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/20/2010 23:35	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103510010A	12/21/2010 20:36	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550027A	12/23/2010 22:59	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	103570006A	12/23/2010 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550027A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103510010A	12/17/2010 12:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 18:48	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164941
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3901 SDG#: DE039-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 11:59	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 11:59	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/28/2010 17:23	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 11:59	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:03	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/07/2011 23:59	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11007007201A	01/07/2011 23:59	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 14:47	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 12:14	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:23	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	34		6.9	8.3		0.86
06192	Benzene	71-43-2	0.10	U	0.10	4.1		0.86
06192	Bromobenzene	108-86-1	0.13	U	0.13	4.1		0.86
06192	Bromochloromethane	74-97-5	0.34	U	0.34	4.1		0.86
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.1		0.86
06192	Bromoform	75-25-2	0.41	U	0.41	4.1		0.86
06192	Bromomethane	74-83-9	0.26	U	0.26	4.1		0.86
06192	2-Butanone	78-93-3	5.6	J	1.3	8.3		0.86
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.1		0.86
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.1		0.86
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	4.1		0.86
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	4.1		0.86
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.1		0.86
06192	Chloroethane	75-00-3	0.13	U	0.13	4.1		0.86
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31	U	0.31	4.1		0.86
06192	Chloroform	67-66-3	0.12	U	0.12	4.1		0.86
06192	Chloromethane	74-87-3	0.34	U	0.34	4.1		0.86
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	4.1		0.86
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	4.1		0.86
06192	Chlorotrifluoroethene	79-38-9	0.52	U	0.52	5.2		0.86
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.72	U	0.72	4.1		0.86
06192	Dibromochloromethane	124-48-1	0.21	U	0.21	4.1		0.86
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.1		0.86
06192	Dibromomethane	74-95-3	0.25	U	0.25	4.1		0.86
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.1		0.86
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.1		0.86
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	4.1		0.86
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.1		0.86
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.1		0.86
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	4.1		0.86
06192	1,1-Dichloroethene	75-35-4	0.40	U	0.40	4.1		0.86
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.1		0.86
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.1		0.86
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.1		0.86
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.1		0.86
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.1		0.86
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	4.1		0.86
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	4.1		0.86
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.1		0.86
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.1		0.86
06192	Freon 113	76-13-1	0.11	U	0.11	4.1		0.86
06192	Freon 133a	75-88-7	0.52	U	0.52	5.2		0.86
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	4.1		0.86
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.3		0.86
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.1		0.86
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.1		0.86
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22	U	0.22	4.1		0.86
06192	4-Methyl-2-pentanone	108-10-1	0.40	U	0.40	8.3		0.86
06192	Methylene Chloride	75-09-2	0.88	J	0.25	4.1		0.86
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.1		0.86

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.10	U	0.10	4.1		0.86
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.1		0.86
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24	U	0.24	4.1		0.86
06192	Tetrachloroethene	127-18-4	0.21	U	0.21	4.1		0.86
06192	Toluene	108-88-3	0.09	J	0.08	4.1		0.86
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	4.1		0.86
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.1		0.86
06192	1,1,1-Trichloroethane	71-55-6	0.21	U	0.21	4.1		0.86
06192	1,1,2-Trichloroethane	79-00-5	0.28	U	0.28	4.1		0.86
06192	Trichloroethene	79-01-6	0.15	U	0.15	4.1		0.86
06192	Trichlorofluoromethane	75-69-4	0.30	U	0.30	4.1		0.86
06192	1,2,3-Trichloropropane	96-18-4	0.34	U	0.34	4.1		0.86
06192	1,2,4-Trimethylbenzene	95-63-6	0.41	U	0.41	4.1		0.86
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.1		0.86
06192	Vinyl Chloride	75-01-4	0.21	U	0.21	4.1		0.86
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.1		0.86
06192	o-Xylene	95-47-6	0.18	U	0.18	4.1		0.86
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.0	U	5.0	15		20.83
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	161		40.0	80.0		2
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	200	U	200	600		1
04688	Benzidine	92-87-5	1,400	U	1,400	4,000		1
04688	Benzoic acid	65-85-0	200	U	200	600		1
04688	Benzyl alcohol	100-51-6	200	U	200	600		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200		1
04688	Carbazole	86-74-8	20	U	20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	40	U	40	200		1
04688	4-Chloroaniline	106-47-8	80	U	80	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200		1
04688	2-Chlorophenol	95-57-8	20	U	20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U	40	200		1
04688	Dibenzofuran	132-64-9	20	U	20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	400		1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200		1
04688	2,4-Dimethylphenol	105-67-9	40	U	40	200		1
04688	3,5-Dimethylphenol	108-68-9	40	U	40	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	600		1
04688	2,4-Dinitrophenol	51-28-5	800	U	800	2,400		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	40	U	40	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200		1
04688	Hexachlorobenzene	118-74-1	20	U	20	200		1
04688	Hexachlorobutadiene	87-68-3	80	U	80	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	600		1
04688	Hexachloroethane	67-72-1	20	U	20	200		1
04688	Isophorone	78-59-1	20	U	20	200		1
04688	2-Methylphenol	95-48-7	40	U	40	200		1
04688	4-Methylphenol	106-44-5	40	U	40	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	20	U	20	200		1
04688	3-Nitroaniline	99-09-2	40	U	40	200		1
04688	4-Nitroaniline	100-01-6	80	U	80	200		1
04688	Nitrobenzene	98-95-3	20	U	20	200		1
04688	2-Nitrophenol	88-75-5	20	U	20	200		1
04688	4-Nitrophenol	100-02-7	200	U	200	600		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	200	U	200	600		1
04688	Phenol	108-95-2	20	U	20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	40	U	40	200		1
04688	2,4,6-Trichlorophenol	88-06-2	40	U	40	200		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.80	U	0.80	2.0		1
10138	Acenaphthylene	208-96-8	0.40	U	0.40	2.0		1
10138	Anthracene	120-12-7	0.40	U	0.40	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.80	U	0.80	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.80	U	0.80	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.80	U	0.80	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.80	U	0.80	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.80	U	0.80	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.2	U	7.2	22		1
10138	Di-n-butylphthalate	84-74-2	7.2	U	7.2	22		1
10138	Chrysene	218-01-9	0.41	J	0.40	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	U	0.80	2.0		1
10138	Diethylphthalate	84-66-2	7.2	U	7.2	22		1
10138	Dimethylphthalate	131-11-3	7.2	U	7.2	22		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	7.2	U	7.2	22		1
10138	Fluoranthene	206-44-0	0.80	U	0.80	2.0		1
10138	Fluorene	86-73-7	0.80	U	0.80	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	U	0.80	2.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.80	U	0.80	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.80	U	0.80	2.0		1
10138	Naphthalene	91-20-3	0.80	U	0.80	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.80	U	0.80	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.2	U	7.2	22		1
10138	Phenanthrene	85-01-8	0.80	U	0.80	2.0		1
10138	Pyrene	129-00-0	0.80	U	0.80	2.0		1
The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.								
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.1		22.4
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	90	U	90	180	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	60	U	60	180	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U	120	360	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U	120	360	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	60	U	60	180	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	60	U	60	180	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	60	U	60	180	10000000	1
10132	HMX	2691-41-0	150	U	150	450	10000000	1
10132	Nitrobenzene	98-95-3	60	U	60	180	10000000	1
10132	Nitroglycerin	55-63-0	1,200	U	1,200	3,600	10000000	1
10132	2-Nitrotoluene	88-72-2	120	U	120	180	10000000	1
10132	3-Nitrotoluene	99-08-1	150	U	150	180	10000000	1
10132	4-Nitrotoluene	99-99-0	120	U	120	180	10000000	1
10132	PETN	78-11-5	1,200	U	1,200	3,600	10000000	1
10132	RDX	121-82-4	75	U	75	180	10000000	1
10132	Tetryl	479-45-8	92	U	92	180	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	1,3,5-Trinitrobenzene	99-35-4	60	U	60	180	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	60	U	60	180	10000000	1
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	3,800		720	1,800		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	4.0		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	4.0		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	4.0		1
10225	PCB-1016	12674-11-2	0.40	U	0.40	2.0		1
10225	PCB-1221	11104-28-2	0.60	U	0.60	2.0		1
10225	PCB-1232	11141-16-5	0.62	U	0.62	2.0		1
10225	PCB-1242	53469-21-9	0.60	U	0.60	2.0		1
10225	PCB-1248	12672-29-6	0.40	U	0.40	2.0		1
10225	PCB-1254	11097-69-1	0.40	U	0.40	2.0		1
10225	PCB-1260	11096-82-5	0.40	U	0.40	2.0		1
10225	PCB-1262	37324-23-5	0.40	U	0.40	2.0		1
10225	PCB-1268	11100-14-4	0.40	U	0.40	2.0		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.48	U	0.48	1.4		1
10199	EFH (C15-C20)	n.a.	0.48	U	0.48	1.4		1
10199	EFH (C21-C30)	n.a.	0.96	J	0.48	1.4		1
10199	EFH (C30 - C40)	n.a.	2.0		0.48	1.4		1
10199	EFH (C8-C11)	n.a.	0.48	U	0.48	1.4		1
	The beginning CCV was outside method criteria. Due to limited extract volume a re-analysis could not be performed; therefore, the data is reported.							
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	120	U	120	600		1
10501	Isopropanol	67-63-0	120	U	120	600		1
10501	Methanol	67-56-1	690		120	600		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	6.0	U	6.0	15		1
08283	Ethylene glycol	107-21-1	6.0	U	6.0	15		1
08283	Propylene glycol	57-55-6	6.0	U	6.0	15		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	2.7	U	2.7	6.3		1
10318	o-Terphenyl	84-15-1	2.7	U	2.7	6.3		1
10318	p-Terphenyl	92-94-4	2.7	U	2.7	6.3		1
	Reporting limits were raised due to limited sample volume.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,300		5.81	23.1		1
07914	Boron	7440-42-8	5.03	J	1.03	5.77		1
01650	Calcium	7440-70-2	24,300		7.08	23.1		1
01654	Iron	7439-89-6	35,300		10.9	46.2		2
01656	Lithium	7439-93-2	27.6		0.25	2.3		1
01657	Magnesium	7439-95-4	8,070		2.93	11.5		1
06958	Manganese	7439-96-5	429		0.0900	0.577		1
10145	Phosphorus	7723-14-0	421		0.646	11.5		1
01662	Potassium	7440-09-7	3,910		20.8	57.7		1
01667	Sodium	7440-23-5	264		43.1	115		1
07968	Strontium	7440-24-6	45.5		0.0716	0.577		1
06969	Tin	7440-31-5	3.01	J	1.15	11.5		1
06970	Titanium	7440-32-6	1,550		0.439	1.15		1
10146	Zirconium	7440-67-7	5.23	J	0.970	5.77		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.340		0.0706	0.235		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.72		0.0706	0.471		2
06126	Barium	7440-39-3	160		0.127	0.471		2
06127	Beryllium	7440-41-7	0.902		0.0188	0.118		2
06128	Cadmium	7440-43-9	0.454		0.0424	0.118		2
06131	Chromium	7440-47-3	41.1		0.141	0.471		2
06132	Cobalt	7440-48-4	9.79		0.0235	0.118		2
06133	Copper	7440-50-8	16.7		0.0777	0.471		2
06135	Lead	7439-92-1	13.1		0.0122	0.235		2
06138	Molybdenum	7439-98-7	0.624		0.0588	0.118		2
06139	Nickel	7440-02-0	19.9		0.118	0.471		2
06141	Selenium	7782-49-2	0.186	J	0.0471	0.471		2
06142	Silver	7440-22-4	0.0442	J	0.0141	0.118		2
06145	Thallium	7440-28-0	0.381		0.0353	0.118		2
06148	Vanadium	7440-62-2	76.0		0.0259	0.118		2
06149	Zinc	7440-66-6	80.0		0.659	3.53		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0046	J	0.0034	0.119		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.7		0.96	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.1	J	0.96	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3902 SDG#: DE039-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 314.0**		ug/kg		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8	U	10.8	36.0		1
	SW-846 7199		mg/kg		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.51	J	0.24	1.2		1
	SW-846 9012B		mg/kg		mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.23	U	0.23	0.63		1
	ASTM D1498		mV		mV	mV	mV	
01821	Oxidation Reduction Potential The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.	n.a.	446		10.0	10.0		1
	SW-846 9045C modified		Std. Units		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.77		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	%	
11624	28a Moisture Content by 160.3 "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.	n.a.	16.7		0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-002-SA5C-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010 20:09	Laura M Krieger	0.86
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103511AA	12/17/2010 12:21	Jason M Long	20.83
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:27	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034923319	12/15/2010 22:25	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10361SLB026	01/14/2011 13:54	Timothy J Trees	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3902 SDG#: DE039-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 13:11	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 19:50	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10361SLB026	12/27/2010 08:15	Joseph S Feister	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34B	12/17/2010 14:12	Elizabeth J Marin	22.4
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:24	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 10:15	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 00:53	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 21:31	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103570006A	12/27/2010 12:50	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/21/2010 00:04	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103510010A	12/21/2010 19:48	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550027A	12/23/2010 23:44	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	103570006A	12/23/2010 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550027A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103510010A	12/17/2010 12:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 20:43	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:10	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164942
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3902 SDG#: DE039-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 13:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 13:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 13:13	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 13:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:11	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 00:42	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11007007201A	01/08/2011 00:42	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 15:59	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11001243201A	01/04/2011 13:58	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:24	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: TB-121410 Water
SSFL Area IV Collocated Soil Sampling
TB-121410

LLI Sample # WW 6164943
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 08:00

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3903 SDG#: DE039-03TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
00527	1,4-Dioxane	123-91-1	0.5	U	0.5	2.0		1
GC Volatiles	**TPH GRO SW-8015B**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
08229	TPH-GRO S.CA water C5-C12	n.a.	20	U	20	50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103502AA	12/16/2010	19:32	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E103502AA	12/16/2010	19:32	Sara E Johnson	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	10350A94A	12/17/2010	17:00	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	10350A94A	12/17/2010	17:00	Katrina T Longenecker	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3904 SDG#: DE039-04EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	6	U	6	20		1
10904	Benzene	71-43-2	0.5	U	0.5	5		1
10904	Bromobenzene	108-86-1	1	U	1	5		1
10904	Bromochloromethane	74-97-5	1	U	1	5		1
10904	Bromodichloromethane	75-27-4	1	U	1	5		1
10904	Bromoform	75-25-2	1	U	1	5		1
10904	Bromomethane	74-83-9	1	U	1	5		1
10904	2-Butanone	78-93-3	3	U	3	10		1
10904	n-Butylbenzene	104-51-8	1	U	1	5		1
10904	sec-Butylbenzene	135-98-8	1	U	1	5		1
10904	tert-Butylbenzene	98-06-6	1	U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1	U	1	5		1
10904	Chlorobenzene	108-90-7	0.8	U	0.8	5		1
10904	Chloroethane	75-00-3	1	U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2	U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.							
10904	Chloroform	67-66-3	0.8	U	0.8	5		1
10904	Chloromethane	74-87-3	1	U	1	5		1
10904	2-Chlorotoluene	95-49-8	1	U	1	5		1
10904	4-Chlorotoluene	106-43-4	1	U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2	U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2	U	2	5		1
10904	Dibromochloromethane	124-48-1	1	U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1	U	1	5		1
10904	Dibromomethane	74-95-3	1	U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2	U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1	U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1	U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8	U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8	U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8	U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1	U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1	U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1	U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1	U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1	U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1	U	1	5		1
10904	Ethylbenzene	100-41-4	0.8	U	0.8	5		1
10904	Freon 113	76-13-1	2	U	2	10		1
10904	Freon 133a	75-88-7	2	U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2	U	2	5		1
10904	2-Hexanone	591-78-6	3	U	3	10		1
10904	Isopropylbenzene	98-82-8	1	U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1	U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5	U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3	U	3	10		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3904 SDG#: DE039-04EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	ug/l	
10904	Methylene Chloride	75-09-2	2	U	2	5		1
10904	n-Propylbenzene	103-65-1	1	U	1	5		1
10904	Styrene	100-42-5	1	U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8	U	0.8	5		1
10904	Toluene	108-88-3	0.7	U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1	U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8	U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8	U	0.8	5		1
10904	Trichloroethene	79-01-6	1	U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2	U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1	U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5		1
10904	Vinyl Chloride	75-01-4	1	U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8	U	0.8	5		1
10904	o-Xylene	95-47-6	0.8	U	0.8	5		1
GC/MS Volatiles	**SW-846 8260B SIM**		ug/l		ug/l	ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5	U	0.5	2.0		1
GC/MS Semivolatiles	**SW-846 8270C**		ug/l		ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1	U	1	5		1
04678	Benzidine	92-87-5	20	U	20	60		1
04678	Benzoic acid	65-85-0	6	U	6	15		1
04678	Benzyl alcohol	100-51-6	5	U	5	15		1
04678	4-Bromophenyl-phenylether	101-55-3	1	U	1	5		1
04678	Carbazole	86-74-8	1	U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1	U	1	5		1
04678	4-Chloroaniline	106-47-8	1	U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1	U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2	U	2	5		1
04678	2-Chlorophenol	95-57-8	1	U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2	U	2	5		1
04678	Dibenzofuran	132-64-9	1	U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1	U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3	U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3	U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	15		1
04678	2,4-Dinitrophenol	51-28-5	10	U	10	30		1
04678	2,4-Dinitrotoluene	121-14-2	1	U	1	5		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3904 SDG#: DE039-04EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l		ug/l	ug/l	ug/l	
04678	2,6-Dinitrotoluene	606-20-2	1	U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1	U	1	5		1
04678	Hexachlorobenzene	118-74-1	1	U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1	U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5	U	5	15		1
04678	Hexachloroethane	67-72-1	1	U	1	5		1
04678	Isophorone	78-59-1	1	U	1	5		1
04678	2-Methylphenol	95-48-7	1	U	1	5		1
04678	4-Methylphenol	106-44-5	2	U	2	5		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1	U	1	5		1
04678	3-Nitroaniline	99-09-2	1	U	1	5		1
04678	4-Nitroaniline	100-01-6	1	U	1	5		1
04678	Nitrobenzene	98-95-3	1	U	1	5		1
04678	2-Nitrophenol	88-75-5	1	U	1	5		1
04678	4-Nitrophenol	100-02-7	10	U	10	30		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2	U	2	5		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04678	Pentachlorophenol	87-86-5	3	U	3	15		1
04678	Phenol	108-95-2	1	U	1	5		1
04678	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1	U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1	U	1	5		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l		ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.010	U	0.010	0.052		1
10137	Acenaphthylene	208-96-8	0.010	U	0.010	0.052		1
10137	Anthracene	120-12-7	0.010	U	0.010	0.052		1
10137	Benzo(a)anthracene	56-55-3	0.010	U	0.010	0.052		1
10137	Benzo(a)pyrene	50-32-8	0.010	U	0.010	0.052		1
10137	Benzo(b)fluoranthene	205-99-2	0.010	U	0.010	0.052		1
10137	Benzo(g,h,i)perylene	191-24-2	0.010	U	0.010	0.052		1
10137	Benzo(k)fluoranthene	207-08-9	0.010	U	0.010	0.052		1
10137	Butylbenzylphthalate	85-68-7	0.060	J	0.052	1.0		1
10137	Di-n-butylphthalate	84-74-2	0.15	J	0.052	1.0		1
10137	Chrysene	218-01-9	0.010	U	0.010	0.052		1
10137	Dibenz(a,h)anthracene	53-70-3	0.010	U	0.010	0.052		1
10137	Diethylphthalate	84-66-2	0.12	J	0.052	1.0		1
10137	Dimethylphthalate	131-11-3	0.052	U	0.052	1.0		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.16	J	0.052	1.0		1
10137	Fluoranthene	206-44-0	0.010	U	0.010	0.052		1
10137	Fluorene	86-73-7	0.010	U	0.010	0.052		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.010	U	0.010	0.052		1
10137	1-Methylnaphthalene	90-12-0	0.010	U	0.010	0.052		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3904 SDG#: DE039-04EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l		ug/l	ug/l	ug/l	
10137	2-Methylnaphthalene	91-57-6	0.010	U	0.010	0.052		1
10137	Naphthalene	91-20-3	0.027	J	0.010	0.052		1
10137	N-Nitrosodimethylamine	62-75-9	0.010	U	0.010	0.052		1
10137	Di-n-octylphthalate	117-84-0	0.083	J	0.052	1.0		1
10137	Phenanthrene	85-01-8	0.010	U	0.010	0.052		1
10137	Pyrene	129-00-0	0.010	U	0.010	0.052		1

Butylbenzylphthalate was detected in the method blank at a concentration of .055 ug/l. The blank value was not subtracted from the analytical result.

The recoveries of several compounds were outside of QC limits in the LCS/LCSD associated with this sample. Sufficient sample was unavailable to repeat the analysis.

GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20	U	20	50		1
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	ug/l	
10407	2,4-D	94-75-7	0.16	U	0.16	0.49		1
10407	Dalapon	75-99-0	0.24	U	0.24	1.2		1
10407	2,4-DB	94-82-6	0.29	U	0.29	0.97		1
10407	Dicamba	1918-00-9	0.078	U	0.078	0.29		1
10407	Dinoseb	88-85-7	0.097	U	0.097	0.49		1
10407	2,4-DP (Dichlorprop)	120-36-5	0.16	U	0.16	0.49		1
10407	MCPA	94-74-6	290	U	290	970		1
10407	MCPP	93-65-2	49	U	49	190		1
10407	2,4,5-T	93-76-5	0.015	U	0.015	0.049		1
10407	2,4,5-TP	93-72-1	0.0097	U	0.0097	0.049		1
Pesticides/PCBs	**SW-846 8081A**		ug/l		ug/l	ug/l	ug/l	
00177	Aldrin	309-00-2	0.0019	U	0.0019	0.0096		1
00177	Alpha BHC	319-84-6	0.0029	U	0.0029	0.0096		1
00177	Beta BHC	319-85-7	0.0028	U	0.0028	0.0096		1
00177	Gamma BHC - Lindane	58-89-9	0.0019	U	0.0019	0.0096		1
00177	Chlordane	57-74-9	0.12	U	0.12	0.48		1
00177	p,p-DDD	72-54-8	0.0048	U	0.0048	0.019		1
00177	p,p-DDE	72-55-9	0.0048	U	0.0048	0.019		1
00177	p,p-DDT	50-29-3	0.0048	U	0.0048	0.019		1
00177	Delta BHC	319-86-8	0.0028	U	0.0028	0.0096		1
00177	Dieldrin	60-57-1	0.0051	U	0.0051	0.019		1
00177	Endosulfan I	959-98-8	0.0041	U	0.0041	0.0096		1
00177	Endosulfan II	33213-65-9	0.014	U	0.014	0.019		1
00177	Endosulfan Sulfate	1031-07-8	0.0056	U	0.0056	0.019		1
00177	Endrin	72-20-8	0.0078	U	0.0078	0.019		1
00177	Endrin Aldehyde	7421-93-4	0.019	U	0.019	0.096		1
00177	Endrin Ketone	53494-70-5	0.0048	U	0.0048	0.019		1
00177	Heptachlor	76-44-8	0.0025	U	0.0025	0.0096		1
00177	Heptachlor Epoxide	1024-57-3	0.0022	U	0.0022	0.0096		1
00177	Methoxychlor	72-43-5	0.029	U	0.029	0.096		1
00177	Mirex	2385-85-5	0.081	U	0.081	0.24		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3904 SDG#: DE039-04EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
00177	Toxaphene	8001-35-2	0.96	U	0.96	2.9		1
Pesticides/PCBs	**SW-846 8082**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10227	Aroclor 5432	63496-31-1	0.096	U	0.096	0.48		1
10227	Aroclor 5442	12642-23-8	0.096	U	0.096	0.48		1
10227	Aroclor 5460	11126-42-4	0.096	U	0.096	0.48		1
10227	PCB-1016	12674-11-2	0.096	U	0.096	0.48		1
10227	PCB-1221	11104-28-2	0.096	U	0.096	0.48		1
10227	PCB-1232	11141-16-5	0.19	U	0.19	0.48		1
10227	PCB-1242	53469-21-9	0.096	U	0.096	0.48		1
10227	PCB-1248	12672-29-6	0.096	U	0.096	0.48		1
10227	PCB-1254	11097-69-1	0.096	U	0.096	0.48		1
10227	PCB-1260	11096-82-5	0.096	U	0.096	0.48		1
10227	PCB-1262	37324-23-5	0.19	U	0.19	0.48		1
10227	PCB-1268	11100-14-4	0.15	U	0.15	0.48		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.0834	U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138	U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702	U	0.0702	0.200		1
01754	Iron	7439-89-6	0.0533	J	0.0522	0.200		1
01756	Lithium	7439-93-2	0.0024	U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172	U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084	U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089	U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239	U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433	U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089	U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098	U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038	U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206	U	0.0206	0.0500		1
	SW-846 6020		**mg/l**		**mg/l**	**mg/l**	**mg/l**	
06024	Antimony	7440-36-0	0.00030	U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095	U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00038	U	0.00038	0.0020		1
06027	Beryllium	7440-41-7	0.00013	U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020	U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060	U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010	U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038	U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000075	J	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00032	J	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050	U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025	U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080	U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015	U	0.00015	0.00050		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3904 SDG#: DE039-04EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020		1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
	EPA 314.0		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
	SW-846 7199		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	Y103512AA	12/18/2010 00:25	Frank A Valla, Jr	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103502AA	12/16/2010 19:52	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E103502AA	12/16/2010 19:52	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y103512AA	12/18/2010 00:25	Frank A Valla, Jr	1
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	10350WAB026	12/31/2010 23:03	Ryan P Byrne	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10350WAH026	01/04/2011 16:23	Gregory J Drahovsky	1
00813	BNA Water Extraction	SW-846 3510C	1	10350WAB026	12/16/2010 14:50	Timothy J Attenberger	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	10350WAH026	12/17/2010 10:00	Olivia Arosemena	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	10350A94A	12/17/2010 17:27	Katrina T Longenecker	1
01146	GC VOA Water Prep	SW-846 5030B	1	10350A94A	12/17/2010 17:27	Katrina T Longenecker	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	103500036A	12/20/2010 00:47	John W Perkins	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103500016A	12/24/2010 11:27	Lisa A Reinert	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: **EB02-SA5B-121410 Water**
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164944
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3904 SDG#: DE039-04EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	103500017A	12/22/2010 09:42	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	103500017A	12/16/2010 21:25	Karen L Beyer	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	103500016A	12/16/2010 21:25	Karen L Beyer	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	103500036A	12/17/2010 12:30	Olivia I Santiago	1
01743	Aluminum	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
08014	Boron	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
01754	Iron	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
01756	Lithium	SW-846 6010B	1	103551848003	12/23/2010 17:02	John P Hook	1
01757	Magnesium	SW-846 6010B	1	103551848003	12/23/2010 17:02	John P Hook	1
07058	Manganese	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
10143	Phosphorus	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
01762	Potassium	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
01767	Sodium	SW-846 6010B	1	103551848003	12/23/2010 17:02	John P Hook	1
08068	Strontium	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
07069	Tin	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
07070	Titanium	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
10144	Zirconium	SW-846 6010B	1	103551848003	12/23/2010 00:13	John W Yanzuk II	1
06024	Antimony	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06026	Barium	SW-846 6020	1	103556050002D	12/23/2010 20:21	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06033	Copper	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06035	Lead	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	103556050002C	12/23/2010 20:21	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	103556050002B	12/23/2010 20:21	Choon Y Tian	1
06042	Silver	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	103556050002A	12/23/2010 20:21	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	103545713001	12/21/2010 06:27	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	103551848003	12/22/2010 09:26	Denise K Conners	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	103556050002	12/22/2010 08:48	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	103545713001	12/20/2010 13:45	Damary Valentin	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	10350196902A	12/17/2010 07:59	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	10352658701A	12/18/2010 15:23	Venia B McFadden	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	10349113001A	12/15/2010 11:31	Nicole M Kepley	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	22		6.5	7.7		0.8
06192	Benzene	71-43-2	0.1	U	0.1	3.9		0.8
06192	Bromobenzene	108-86-1	0.13	U	0.13	3.9		0.8
06192	Bromochloromethane	74-97-5	0.32	U	0.32	3.9		0.8
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	3.9		0.8
06192	Bromoform	75-25-2	0.39	U	0.39	3.9		0.8
06192	Bromomethane	74-83-9	0.24	U	0.24	3.9		0.8
06192	2-Butanone	78-93-3	3.4	J	1.2	7.7		0.8
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	3.9		0.8
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	3.9		0.8
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	3.9		0.8
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	3.9		0.8
06192	Chlorobenzene	108-90-7	0.11	U	0.11	3.9		0.8
06192	Chloroethane	75-00-3	0.13	U	0.13	3.9		0.8
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.29	U	0.29	3.9		0.8
06192	Chloroform	67-66-3	0.12	U	0.12	3.9		0.8
06192	Chloromethane	74-87-3	0.32	U	0.32	3.9		0.8
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	3.9		0.8
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	3.9		0.8
06192	Chlorotrifluoroethene	79-38-9	0.48	U	0.48	4.8		0.8
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.68	U	0.68	3.9		0.8
06192	Dibromochloromethane	124-48-1	0.19	U	0.19	3.9		0.8
06192	1,2-Dibromoethane	106-93-4	0.16	U	0.16	3.9		0.8
06192	Dibromomethane	74-95-3	0.23	U	0.23	3.9		0.8
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	3.9		0.8
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	3.9		0.8
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	3.9		0.8
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	3.9		0.8
06192	1,1-Dichloroethane	75-34-3	0.1	U	0.1	3.9		0.8
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	3.9		0.8
06192	1,1-Dichloroethene	75-35-4	0.38	U	0.38	3.9		0.8
06192	cis-1,2-Dichloroethene	156-59-2	0.18	U	0.18	3.9		0.8
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	3.9		0.8
06192	1,2-Dichloropropane	78-87-5	0.16	U	0.16	3.9		0.8
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	3.9		0.8
06192	2,2-Dichloropropane	594-20-7	0.16	U	0.16	3.9		0.8
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	3.9		0.8
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	3.9		0.8
06192	trans-1,3-Dichloropropene	10061-02-6	0.16	U	0.16	3.9		0.8
06192	Ethylbenzene	100-41-4	0.06	U	0.06	3.9		0.8
06192	Freon 113	76-13-1	0.11	U	0.11	3.9		0.8
06192	Freon 133a	75-88-7	0.48	U	0.48	4.8		0.8
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	3.9		0.8
06192	2-Hexanone	591-78-6	1.5	U	1.5	7.7		0.8
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	3.9		0.8
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	3.9		0.8
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.20	U	0.20	3.9		0.8
06192	4-Methyl-2-pentanone	108-10-1	0.38	U	0.38	7.7		0.8
06192	Methylene Chloride	75-09-2	1.1	J	0.23	3.9		0.8
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	3.9		0.8

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.1	U	0.1	3.9		0.8
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	3.9		0.8
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22	U	0.22	3.9		0.8
06192	Tetrachloroethene	127-18-4	0.19	U	0.19	3.9		0.8
06192	Toluene	108-88-3	0.08	J	0.08	3.9		0.8
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	3.9		0.8
06192	1,2,4-Trichlorobenzene	120-82-1	0.17	U	0.17	3.9		0.8
06192	1,1,1-Trichloroethane	71-55-6	0.19	U	0.19	3.9		0.8
06192	1,1,2-Trichloroethane	79-00-5	0.26	U	0.26	3.9		0.8
06192	Trichloroethene	79-01-6	0.15	U	0.15	3.9		0.8
06192	Trichlorofluoromethane	75-69-4	0.28	U	0.28	3.9		0.8
06192	1,2,3-Trichloropropane	96-18-4	0.32	U	0.32	3.9		0.8
06192	1,2,4-Trimethylbenzene	95-63-6	0.39	U	0.39	3.9		0.8
06192	1,3,5-Trimethylbenzene	108-67-8	0.1	U	0.1	3.9		0.8
06192	Vinyl Chloride	75-01-4	0.19	U	0.19	3.9		0.8
06192	m+p-Xylene	179601-23-1	0.16	U	0.16	3.9		0.8
06192	o-Xylene	95-47-6	0.16	U	0.16	3.9		0.8
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.7	U	4.7	14		19.47
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	80.4		20.0	40.1		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	200	U	200	600		1
04688	Benzidine	92-87-5	1,400	U	1,400	4,000		1
04688	Benzoic acid	65-85-0	200	U	200	600		1
04688	Benzyl alcohol	100-51-6	200	U	200	600		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200		1
04688	Carbazole	86-74-8	20	U	20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	40	U	40	200		1
04688	4-Chloroaniline	106-47-8	80	U	80	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200		1
04688	2-Chlorophenol	95-57-8	20	U	20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U	40	200		1
04688	Dibenzofuran	132-64-9	20	U	20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	400		1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200		1
04688	2,4-Dimethylphenol	105-67-9	40	U	40	200		1
04688	3,5-Dimethylphenol	108-68-9	40	U	40	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	600		1
04688	2,4-Dinitrophenol	51-28-5	800	U	800	2,400		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	2,4-Dinitrotoluene	121-14-2	40	U	40	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200		1
04688	Hexachlorobenzene	118-74-1	20	U	20	200		1
04688	Hexachlorobutadiene	87-68-3	80	U	80	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	600		1
04688	Hexachloroethane	67-72-1	20	U	20	200		1
04688	Isophorone	78-59-1	20	U	20	200		1
04688	2-Methylphenol	95-48-7	40	U	40	200		1
04688	4-Methylphenol	106-44-5	40	U	40	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	20	U	20	200		1
04688	3-Nitroaniline	99-09-2	40	U	40	200		1
04688	4-Nitroaniline	100-01-6	80	U	80	200		1
04688	Nitrobenzene	98-95-3	20	U	20	200		1
04688	2-Nitrophenol	88-75-5	20	U	20	200		1
04688	4-Nitrophenol	100-02-7	200	U	200	600		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	200	U	200	600		1
04688	Phenol	108-95-2	20	U	20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	40	U	40	200		1
04688	2,4,6-Trichlorophenol	88-06-2	40	U	40	200		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.80	U	0.80	2.0		1
10138	Acenaphthylene	208-96-8	0.40	U	0.40	2.0		1
10138	Anthracene	120-12-7	0.40	U	0.40	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.80	U	0.80	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.80	U	0.80	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.80	U	0.80	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.80	U	0.80	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.80	U	0.80	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.2	U	7.2	22		1
10138	Di-n-butylphthalate	84-74-2	7.2	U	7.2	22		1
10138	Chrysene	218-01-9	0.53	J	0.40	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	U	0.80	2.0		1
10138	Diethylphthalate	84-66-2	7.2	U	7.2	22		1
10138	Dimethylphthalate	131-11-3	7.2	U	7.2	22		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J	7.2	22		1
10138	Fluoranthene	206-44-0	0.80	U	0.80	2.0		1
10138	Fluorene	86-73-7	0.80	U	0.80	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	U	0.80	2.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.80	U	0.80	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.80	U	0.80	2.0		1
10138	Naphthalene	91-20-3	0.80	U	0.80	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.80	U	0.80	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.2	U	7.2	22		1
10138	Phenanthrene	85-01-8	0.80	U	0.80	2.0		1
10138	Pyrene	129-00-0	0.80	U	0.80	2.0		1
	The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.0		21.44
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	90	U	90	180	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	60	U	60	180	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U	120	360	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U	120	360	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	60	U	60	180	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	60	U	60	180	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	60	U	60	180	10000000	1
10132	HMX	2691-41-0	150	U	150	450	10000000	1
10132	Nitrobenzene	98-95-3	60	U	60	180	10000000	1
10132	Nitroglycerin	55-63-0	1,200	U	1,200	3,600	10000000	1
10132	2-Nitrotoluene	88-72-2	120	U	120	180	10000000	1
10132	3-Nitrotoluene	99-08-1	150	U	150	180	10000000	1
10132	4-Nitrotoluene	99-99-0	120	U	120	180	10000000	1
10132	PETN	78-11-5	1,200	U	1,200	3,600	10000000	1
10132	RDX	121-82-4	75	U	75	180	10000000	1
10132	Tetryl	479-45-8	92	U	92	180	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	1,3,5-Trinitrobenzene	99-35-4	60	U	60	180	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	60	U	60	180	10000000	1
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	2,600		720	1,800		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	4.0		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	4.0		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	4.0		1
10225	PCB-1016	12674-11-2	0.40	U	0.40	2.0		1
10225	PCB-1221	11104-28-2	0.60	U	0.60	2.0		1
10225	PCB-1232	11141-16-5	0.63	U	0.63	2.0		1
10225	PCB-1242	53469-21-9	0.60	U	0.60	2.0		1
10225	PCB-1248	12672-29-6	0.40	U	0.40	2.0		1
10225	PCB-1254	11097-69-1	0.66	J	0.40	2.0		1
10225	PCB-1260	11096-82-5	0.40	U	0.40	2.0		1
10225	PCB-1262	37324-23-5	0.40	U	0.40	2.0		1
10225	PCB-1268	11100-14-4	0.40	U	0.40	2.0		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.48	U	0.48	1.4		1
10199	EFH (C15-C20)	n.a.	0.48	U	0.48	1.4		1
10199	EFH (C21-C30)	n.a.	0.48	U	0.48	1.4		1
10199	EFH (C30 - C40)	n.a.	0.48	U	0.48	1.4		1
10199	EFH (C8-C11)	n.a.	0.48	U	0.48	1.4		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	120	U	120	600		1
10501	Isopropanol	67-63-0	120	U	120	600		1
10501	Methanol	67-56-1	620		120	600		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	6.0	U	6.0	15		1
08283	Ethylene glycol	107-21-1	6.0	U	6.0	15		1
08283	Propylene glycol	57-55-6	6.0	U	6.0	15		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.8	U	1.8	4.2		1
10318	o-Terphenyl	84-15-1	1.8	U	1.8	4.2		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	p-Terphenyl	92-94-4	1.8	U	1.8	4.2		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	33,600		5.99	23.8		1
07914	Boron	7440-42-8	8.24		1.06	5.95		1
01650	Calcium	7440-70-2	26,200		7.29	23.8		1
01654	Iron	7439-89-6	34,100		11.2	47.6		2
01656	Lithium	7439-93-2	28.1		0.26	2.4		1
01657	Magnesium	7439-95-4	8,130		3.02	11.9		1
06958	Manganese	7439-96-5	402		0.0928	0.595		1
10145	Phosphorus	7723-14-0	468		0.666	11.9		1
01662	Potassium	7440-09-7	4,790		21.4	59.5		1
01667	Sodium	7440-23-5	256		44.4	119		1
07968	Strontium	7440-24-6	51.3		0.0738	0.595		1
06969	Tin	7440-31-5	2.81	J	1.19	11.9		1
06970	Titanium	7440-32-6	1,610		0.452	1.19		1
10146	Zirconium	7440-67-7	4.89	J	1.00	5.95		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.366		0.0700	0.233		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.20		0.0700	0.467		2
06126	Barium	7440-39-3	183		0.126	0.467		2
06127	Beryllium	7440-41-7	0.889		0.0187	0.117		2
06128	Cadmium	7440-43-9	0.454		0.0420	0.117		2
06131	Chromium	7440-47-3	43.0		0.140	0.467		2
06132	Cobalt	7440-48-4	10.0		0.0233	0.117		2
06133	Copper	7440-50-8	17.9		0.0770	0.467		2
06135	Lead	7439-92-1	14.0		0.0121	0.233		2
06138	Molybdenum	7439-98-7	0.801		0.0583	0.117		2
06139	Nickel	7440-02-0	20.3		0.117	0.467		2
06141	Selenium	7782-49-2	0.252	J	0.0467	0.467		2
06142	Silver	7440-22-4	0.0645	J	0.0140	0.117		2
06145	Thallium	7440-28-0	0.439		0.0350	0.117		2
06148	Vanadium	7440-62-2	79.2		0.0257	0.117		2
06149	Zinc	7440-66-6	96.1		0.653	3.50		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0068	J	0.0034	0.120		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6		0.96	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.96	U	0.96	1.8		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8	U	10.8	36.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3905 SDG#: DE039-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	1.8		0.24	1.2		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.21	U	0.21	0.58		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	438		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.15		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	16.8		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-004-SA5C-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010 20:31	Laura M Krieger	0.8
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103511AA	12/17/2010 12:41	Jason M Long	19.47
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035023323	12/16/2010 12:09	Stephanie A Sanchez	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035023323	12/16/2010 12:07	Stephanie A Sanchez	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035023323	12/16/2010 12:07	Stephanie A Sanchez	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035023323	12/16/2010 12:09	Stephanie A Sanchez	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10361SLB026	01/05/2011 19:32	Timothy J Trees	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3905 SDG#: DE039-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 13:46	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 20:25	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10361SLB026	12/27/2010 08:15	Joseph S Feister	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34B	12/17/2010 14:49	Elizabeth J Marin	21.44
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035023324	12/16/2010 12:10	Stephanie A Sanchez	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 10:58	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 01:02	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 21:49	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103570006A	12/27/2010 13:15	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/21/2010 00:19	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103510010A	12/21/2010 20:04	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550027A	12/24/2010 00:29	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	103570006A	12/23/2010 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550027A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103510010A	12/17/2010 12:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 20:46	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:21	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164945
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3905 SDG#: DE039-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 13:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 13:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 13:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 13:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:13	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 00:56	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11007007201A	01/08/2011 00:56	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 16:23	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 14:22	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202A	12/27/2010 20:25	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202A	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.4	U	7.4	8.8		0.92
06192	Benzene	71-43-2	0.11	U	0.11	4.4		0.92
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.4		0.92
06192	Bromochloromethane	74-97-5	0.36	U	0.36	4.4		0.92
06192	Bromodichloromethane	75-27-4	0.09	U	0.09	4.4		0.92
06192	Bromoform	75-25-2	0.44	U	0.44	4.4		0.92
06192	Bromomethane	74-83-9	0.28	U	0.28	4.4		0.92
06192	2-Butanone	78-93-3	1.3	U	1.3	8.8		0.92
06192	n-Butylbenzene	104-51-8	0.13	U	0.13	4.4		0.92
06192	sec-Butylbenzene	135-98-8	0.07	U	0.07	4.4		0.92
06192	tert-Butylbenzene	98-06-6	0.18	U	0.18	4.4		0.92
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.4		0.92
06192	Chlorobenzene	108-90-7	0.12	U	0.12	4.4		0.92
06192	Chloroethane	75-00-3	0.14	U	0.14	4.4		0.92
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.33	U	0.33	4.4		0.92
06192	Chloroform	67-66-3	0.13	U	0.13	4.4		0.92
06192	Chloromethane	74-87-3	0.36	U	0.36	4.4		0.92
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.4		0.92
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.4		0.92
06192	Chlorotrifluoroethene	79-38-9	0.55	U	0.55	5.5		0.92
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.77	U	0.77	4.4		0.92
06192	Dibromochloromethane	124-48-1	0.22	U	0.22	4.4		0.92
06192	1,2-Dibromoethane	106-93-4	0.19	U	0.19	4.4		0.92
06192	Dibromomethane	74-95-3	0.26	U	0.26	4.4		0.92
06192	1,2-Dichlorobenzene	95-50-1	0.1	U	0.1	4.4		0.92
06192	1,3-Dichlorobenzene	541-73-1	0.13	U	0.13	4.4		0.92
06192	1,4-Dichlorobenzene	106-46-7	0.18	U	0.18	4.4		0.92
06192	Dichlorodifluoromethane	75-71-8	0.13	U	0.13	4.4		0.92
06192	1,1-Dichloroethane	75-34-3	0.11	U	0.11	4.4		0.92
06192	1,2-Dichloroethane	107-06-2	0.16	U	0.16	4.4		0.92
06192	1,1-Dichloroethene	75-35-4	0.43	U	0.43	4.4		0.92
06192	cis-1,2-Dichloroethene	156-59-2	0.21	U	0.21	4.4		0.92
06192	trans-1,2-Dichloroethene	156-60-5	0.13	U	0.13	4.4		0.92
06192	1,2-Dichloropropane	78-87-5	0.19	U	0.19	4.4		0.92
06192	1,3-Dichloropropane	142-28-9	0.09	U	0.09	4.4		0.92
06192	2,2-Dichloropropane	594-20-7	0.19	U	0.19	4.4		0.92
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.4		0.92
06192	cis-1,3-Dichloropropene	10061-01-5	0.18	U	0.18	4.4		0.92
06192	trans-1,3-Dichloropropene	10061-02-6	0.19	U	0.19	4.4		0.92
06192	Ethylbenzene	100-41-4	0.07	U	0.07	4.4		0.92
06192	Freon 113	76-13-1	0.12	U	0.12	4.4		0.92
06192	Freon 133a	75-88-7	0.55	U	0.55	5.5		0.92
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.4		0.92
06192	2-Hexanone	591-78-6	1.8	U	1.8	8.8		0.92
06192	Isopropylbenzene	98-82-8	0.07	U	0.07	4.4		0.92
06192	p-Isopropyltoluene	99-87-6	0.12	U	0.12	4.4		0.92
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.23	U	0.23	4.4		0.92
06192	4-Methyl-2-pentanone	108-10-1	0.43	U	0.43	8.8		0.92
06192	Methylene Chloride	75-09-2	0.97	J	0.26	4.4		0.92
06192	n-Propylbenzene	103-65-1	0.08	U	0.08	4.4		0.92

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.11	U	0.11	4.4		0.92
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12	U	0.12	4.4		0.92
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.25	U	0.25	4.4		0.92
06192	Tetrachloroethene	127-18-4	0.22	U	0.22	4.4		0.92
06192	Toluene	108-88-3	0.09	J	0.09	4.4		0.92
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.4		0.92
06192	1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	4.4		0.92
06192	1,1,1-Trichloroethane	71-55-6	0.22	U	0.22	4.4		0.92
06192	1,1,2-Trichloroethane	79-00-5	0.30	U	0.30	4.4		0.92
06192	Trichloroethene	79-01-6	0.16	U	0.16	4.4		0.92
06192	Trichlorofluoromethane	75-69-4	0.32	U	0.32	4.4		0.92
06192	1,2,3-Trichloropropane	96-18-4	0.36	U	0.36	4.4		0.92
06192	1,2,4-Trimethylbenzene	95-63-6	0.44	U	0.44	4.4		0.92
06192	1,3,5-Trimethylbenzene	108-67-8	0.11	U	0.11	4.4		0.92
06192	Vinyl Chloride	75-01-4	0.22	U	0.22	4.4		0.92
06192	m+p-Xylene	179601-23-1	0.19	U	0.19	4.4		0.92
06192	o-Xylene	95-47-6	0.19	U	0.19	4.4		0.92
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.6	U	4.6	14		19.08
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	66.2		19.9	39.8		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	200	U	200	600		1
04688	Benzidine	92-87-5	1,400	U	1,400	4,000		1
04688	Benzoic acid	65-85-0	200	U	200	600		1
04688	Benzyl alcohol	100-51-6	200	U	200	600		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200		1
04688	Carbazole	86-74-8	20	U	20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	40	U	40	200		1
04688	4-Chloroaniline	106-47-8	80	U	80	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200		1
04688	2-Chlorophenol	95-57-8	20	U	20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U	40	200		1
04688	Dibenzofuran	132-64-9	20	U	20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	400		1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200		1
04688	2,4-Dimethylphenol	105-67-9	40	U	40	200		1
04688	3,5-Dimethylphenol	108-68-9	40	U	40	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	600		1
04688	2,4-Dinitrophenol	51-28-5	800	U	800	2,400		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	2,4-Dinitrotoluene	121-14-2	40	U	40	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200		1
04688	Hexachlorobenzene	118-74-1	20	U	20	200		1
04688	Hexachlorobutadiene	87-68-3	80	U	80	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	600		1
04688	Hexachloroethane	67-72-1	20	U	20	200		1
04688	Isophorone	78-59-1	20	U	20	200		1
04688	2-Methylphenol	95-48-7	40	U	40	200		1
04688	4-Methylphenol	106-44-5	40	U	40	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	20	U	20	200		1
04688	3-Nitroaniline	99-09-2	40	U	40	200		1
04688	4-Nitroaniline	100-01-6	80	U	80	200		1
04688	Nitrobenzene	98-95-3	20	U	20	200		1
04688	2-Nitrophenol	88-75-5	20	U	20	200		1
04688	4-Nitrophenol	100-02-7	200	U	200	600		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	200	U	200	600		1
04688	Phenol	108-95-2	20	U	20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	40	U	40	200		1
04688	2,4,6-Trichlorophenol	88-06-2	40	U	40	200		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.80	U	0.80	2.0		1
10138	Acenaphthylene	208-96-8	0.40	U	0.40	2.0		1
10138	Anthracene	120-12-7	0.40	U	0.40	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.80	U	0.80	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.80	U	0.80	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.80	U	0.80	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.80	U	0.80	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.80	U	0.80	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.2	U	7.2	21		1
10138	Di-n-butylphthalate	84-74-2	7.2	U	7.2	21		1
10138	Chrysene	218-01-9	0.50	J	0.40	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	U	0.80	2.0		1
10138	Diethylphthalate	84-66-2	7.2	U	7.2	21		1
10138	Dimethylphthalate	131-11-3	7.2	U	7.2	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	7.3	J	7.2	21		1
10138	Fluoranthene	206-44-0	0.80	U	0.80	2.0		1
10138	Fluorene	86-73-7	0.80	U	0.80	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	U	0.80	2.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.80	U	0.80	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.80	U	0.80	2.0		1
10138	Naphthalene	91-20-3	0.80	U	0.80	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.80	U	0.80	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.2	U	7.2	21		1
10138	Phenanthrene	85-01-8	0.80	U	0.80	2.0		1
10138	Pyrene	129-00-0	0.80	U	0.80	2.0		1
	The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1		20.36
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	89	U	89	180	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	60	U	60	180	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U	120	360	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U	120	360	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	60	U	60	180	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	60	U	60	180	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	60	U	60	180	10000000	1
10132	HMX	2691-41-0	150	U	150	450	10000000	1
10132	Nitrobenzene	98-95-3	60	U	60	180	10000000	1
10132	Nitroglycerin	55-63-0	1,200	U	1,200	3,600	10000000	1
10132	2-Nitrotoluene	88-72-2	120	U	120	180	10000000	1
10132	3-Nitrotoluene	99-08-1	150	U	150	180	10000000	1
10132	4-Nitrotoluene	99-99-0	120	U	120	180	10000000	1
10132	PETN	78-11-5	1,200	U	1,200	3,600	10000000	1
10132	RDX	121-82-4	75	U	75	180	10000000	1
10132	Tetryl	479-45-8	91	U	91	180	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	1,3,5-Trinitrobenzene	99-35-4	60	U	60	180	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	60	U	60	180	10000000	1
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	720	U	720	1,800		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.9		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.9		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.9		1
10225	PCB-1016	12674-11-2	0.39	U	0.39	2.0		1
10225	PCB-1221	11104-28-2	0.60	U	0.60	2.0		1
10225	PCB-1232	11141-16-5	0.62	U	0.62	2.0		1
10225	PCB-1242	53469-21-9	0.60	U	0.60	2.0		1
10225	PCB-1248	12672-29-6	0.39	U	0.39	2.0		1
10225	PCB-1254	11097-69-1	0.39	U	0.39	2.0		1
10225	PCB-1260	11096-82-5	0.39	U	0.39	2.0		1
10225	PCB-1262	37324-23-5	0.39	U	0.39	2.0		1
10225	PCB-1268	11100-14-4	0.39	U	0.39	2.0		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.48	U	0.48	1.4		1
10199	EFH (C15-C20)	n.a.	0.48	U	0.48	1.4		1
10199	EFH (C21-C30)	n.a.	0.48	U	0.48	1.4		1
10199	EFH (C30 - C40)	n.a.	1.1	J	0.48	1.4		1
10199	EFH (C8-C11)	n.a.	0.48	U	0.48	1.4		1
	The beginning CCV was outside method criteria. Due to limited extract volume a re-analysis could not be performed; therefore, the data is reported.							
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	120	U	120	600		1
10501	Isopropanol	67-63-0	120	U	120	600		1
10501	Methanol	67-56-1	410	J	120	600		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	6.0	U	6.0	15		1
08283	Ethylene glycol	107-21-1	6.0	U	6.0	15		1
08283	Propylene glycol	57-55-6	6.0	U	6.0	15		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.8	U	1.8	4.2		1
10318	o-Terphenyl	84-15-1	1.8	U	1.8	4.2		1
10318	p-Terphenyl	92-94-4	1.8	U	1.8	4.2		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,700		5.77	22.9		1
07914	Boron	7440-42-8	4.55	J	1.02	5.74		1
01650	Calcium	7440-70-2	16,000		7.03	22.9		1
01654	Iron	7439-89-6	30,600		10.8	45.9		2
01656	Lithium	7439-93-2	28.2		0.25	2.3		1
01657	Magnesium	7439-95-4	6,590		2.91	11.5		1
06958	Manganese	7439-96-5	370		0.0895	0.574		1
10145	Phosphorus	7723-14-0	311		0.643	11.5		1
01662	Potassium	7440-09-7	3,660		20.7	57.4		1
01667	Sodium	7440-23-5	182		42.8	115		1
07968	Strontium	7440-24-6	34.0		0.0711	0.574		1
06969	Tin	7440-31-5	2.90	J	1.15	11.5		1
06970	Titanium	7440-32-6	1,580		0.436	1.15		1
10146	Zirconium	7440-67-7	3.75	J	0.964	5.74		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.318		0.0709	0.236		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.70		0.0709	0.473		2
06126	Barium	7440-39-3	160		0.128	0.473		2
06127	Beryllium	7440-41-7	0.928		0.0189	0.118		2
06128	Cadmium	7440-43-9	0.237		0.0425	0.118		2
06131	Chromium	7440-47-3	39.0		0.142	0.473		2
06132	Cobalt	7440-48-4	9.82		0.0236	0.118		2
06133	Copper	7440-50-8	15.8		0.0780	0.473		2
06135	Lead	7439-92-1	12.5		0.0123	0.236		2
06138	Molybdenum	7439-98-7	0.470		0.0591	0.118		2
06139	Nickel	7440-02-0	17.8		0.118	0.473		2
06141	Selenium	7782-49-2	0.0746	J	0.0473	0.473		2
06142	Silver	7440-22-4	0.0893	J	0.0142	0.118		2
06145	Thallium	7440-28-0	0.422		0.0354	0.118		2
06148	Vanadium	7440-62-2	71.3		0.0260	0.118		2
06149	Zinc	7440-66-6	70.9		0.662	3.54		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0138	J	0.0033	0.115		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.2		0.95	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.6	J	0.95	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3906 SDG#: DE039-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 314.0**		ug/kg		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.7	U	10.7	35.8		1
	SW-846 7199		mg/kg		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.24	U	0.24	1.2		1
	SW-846 9012B		mg/kg		mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.21	U	0.21	0.58		1
	ASTM D1498		mV		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	426		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		Std. Units		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.25		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	16.2		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-004-SA5C-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010 20:54	Laura M Krieger	0.92
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103511AA	12/17/2010 13:01	Jason M Long	19.08
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035023323	12/16/2010 12:08	Stephanie A Sanchez	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035023323	12/16/2010 12:07	Stephanie A Sanchez	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035023323	12/16/2010 12:07	Stephanie A Sanchez	n.a.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3906 SDG#: DE039-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035023323	12/16/2010 12:08	Stephanie A Sanchez	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10361SLB026	01/05/2011 19:49	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 14:20	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 21:00	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10361SLB026	12/27/2010 08:15	Joseph S Feister	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34B	12/17/2010 15:25	Elizabeth J Marin	20.36
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035023323	12/16/2010 12:08	Stephanie A Sanchez	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 11:40	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 01:12	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 22:08	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103570006A	12/27/2010 13:40	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/21/2010 00:33	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103510010A	12/21/2010 18:28	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550027A	12/24/2010 01:14	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	103570006A	12/23/2010 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550027A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103510010A	12/17/2010 12:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 20:50	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164946
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3906 SDG#: DE039-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:25	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 13:19	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 13:19	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 13:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 13:19	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:14	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 01:39	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11007007201A	01/08/2011 01:39	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 17:11	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 14:38	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202B	12/27/2010 20:27	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202B	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182102B	12/16/2010 13:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039402B	12/16/2010 13:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3907 SDG#: DE039-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.0	U	7.0	8.4		0.94
06192	Benzene	71-43-2	0.10	U	0.10	4.2		0.94
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.2		0.94
06192	Bromochloromethane	74-97-5	0.34	U	0.34	4.2		0.94
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.2		0.94
06192	Bromoform	75-25-2	0.42	U	0.42	4.2		0.94
06192	Bromomethane	74-83-9	0.26	U	0.26	4.2		0.94
06192	2-Butanone	78-93-3	1.3	U	1.3	8.4		0.94
06192	n-Butylbenzene	104-51-8	0.13	U	0.13	4.2		0.94
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.2		0.94
06192	tert-Butylbenzene	98-06-6	0.17	U	0.17	4.2		0.94
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.2		0.94
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.2		0.94
06192	Chloroethane	75-00-3	0.14	U	0.14	4.2		0.94
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31	U	0.31	4.2		0.94
06192	Chloroform	67-66-3	0.13	U	0.13	4.2		0.94
06192	Chloromethane	74-87-3	0.34	U	0.34	4.2		0.94
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.2		0.94
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.2		0.94
06192	Chlorotrifluoroethene	79-38-9	0.52	U	0.52	5.2		0.94
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.73	U	0.73	4.2		0.94
06192	Dibromochloromethane	124-48-1	0.21	U	0.21	4.2		0.94
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.2		0.94
06192	Dibromomethane	74-95-3	0.25	U	0.25	4.2		0.94
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.2		0.94
06192	1,3-Dichlorobenzene	541-73-1	0.13	U	0.13	4.2		0.94
06192	1,4-Dichlorobenzene	106-46-7	0.17	U	0.17	4.2		0.94
06192	Dichlorodifluoromethane	75-71-8	0.13	U	0.13	4.2		0.94
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.2		0.94
06192	1,2-Dichloroethane	107-06-2	0.16	U	0.16	4.2		0.94
06192	1,1-Dichloroethene	75-35-4	0.41	U	0.41	4.2		0.94
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.2		0.94
06192	trans-1,2-Dichloroethene	156-60-5	0.13	U	0.13	4.2		0.94
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.2		0.94
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.2		0.94
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.2		0.94
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.2		0.94
06192	cis-1,3-Dichloropropene	10061-01-5	0.17	U	0.17	4.2		0.94
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.2		0.94
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.2		0.94
06192	Freon 113	76-13-1	0.11	U	0.11	4.2		0.94
06192	Freon 133a	75-88-7	0.52	U	0.52	5.2		0.94
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.2		0.94
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.4		0.94
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.2		0.94
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.2		0.94
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22	U	0.22	4.2		0.94
06192	4-Methyl-2-pentanone	108-10-1	0.41	U	0.41	8.4		0.94
06192	Methylene Chloride	75-09-2	2.8	J	0.25	4.2		0.94
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.2		0.94

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3907 SDG#: DE039-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.10	U	0.10	4.2		0.94
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.2		0.94
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24	U	0.24	4.2		0.94
06192	Tetrachloroethene	127-18-4	0.21	U	0.21	4.2		0.94
06192	Toluene	108-88-3	0.09	J	0.08	4.2		0.94
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.2		0.94
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.2		0.94
06192	1,1,1-Trichloroethane	71-55-6	0.21	U	0.21	4.2		0.94
06192	1,1,2-Trichloroethane	79-00-5	0.28	U	0.28	4.2		0.94
06192	Trichloroethene	79-01-6	0.16	U	0.16	4.2		0.94
06192	Trichlorofluoromethane	75-69-4	0.30	U	0.30	4.2		0.94
06192	1,2,3-Trichloropropane	96-18-4	0.34	U	0.34	4.2		0.94
06192	1,2,4-Trimethylbenzene	95-63-6	0.42	U	0.42	4.2		0.94
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.2		0.94
06192	Vinyl Chloride	75-01-4	0.21	U	0.21	4.2		0.94
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.2		0.94
06192	o-Xylene	95-47-6	0.18	U	0.18	4.2		0.94
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.1	U	5.1	15		23.02
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	560		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U	190	560		1
04688	Benzyl alcohol	100-51-6	190	U	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190		1
04688	4-Chloroaniline	106-47-8	74	U	74	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560		1
04688	2,4-Dinitrophenol	51-28-5	740	U	740	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3907 SDG#: DE039-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	50	J	19	370		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	74	U	74	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	37	U	37	190		1
04688	4-Methylphenol	106-44-5	37	U	37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	37	U	37	190		1
04688	4-Nitroaniline	100-01-6	74	U	74	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	560		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190		1
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.74	U	0.74	1.9		1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.9		1
10138	Anthracene	120-12-7	0.37	U	0.37	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.74	U	0.74	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.74	U	0.74	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.74	U	0.74	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.74	U	0.74	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.74	U	0.74	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.7	U	6.7	20		1
10138	Di-n-butylphthalate	84-74-2	6.7	U	6.7	20		1
10138	Chrysene	218-01-9	0.37	U	0.37	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.74	U	0.74	1.9		1
10138	Diethylphthalate	84-66-2	6.7	U	6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7	U	6.7	20		1
10138	Fluoranthene	206-44-0	0.74	U	0.74	1.9		1
10138	Fluorene	86-73-7	0.74	U	0.74	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.74	U	0.74	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.74	U	0.74	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.74	U	0.74	1.9		1
10138	Naphthalene	91-20-3	0.74	U	0.74	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3907 SDG#: DE039-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	N-Nitrosodimethylamine	62-75-9	0.74	U	0.74	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.7	U	6.7	20		1
10138	Phenanthrene	85-01-8	0.74	U	0.74	1.9		1
10138	Pyrene	129-00-0	0.74	U	0.74	1.9		1
	The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9		1
10225	PCB-1232	11141-16-5	0.58	U	0.58	1.9		1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37	U	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.37	U	0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,600		5.38	21.4		1
07914	Boron	7440-42-8	2.76	J	0.952	5.35		1
01650	Calcium	7440-70-2	2,770		6.56	21.4		1
01654	Iron	7439-89-6	21,400		5.04	21.4		1
01656	Lithium	7439-93-2	19.6		0.24	2.1		1
01657	Magnesium	7439-95-4	3,570		2.72	10.7		1
06958	Manganese	7439-96-5	143		0.0834	0.535		1
10145	Phosphorus	7723-14-0	131		0.599	10.7		1
01662	Potassium	7440-09-7	1,450		19.3	53.5		1
01667	Sodium	7440-23-5	386		39.9	107		1
07968	Strontium	7440-24-6	26.3		0.0663	0.535		1
06969	Tin	7440-31-5	2.61	J	1.07	10.7		1
06970	Titanium	7440-32-6	1,250		0.406	1.07		1
10146	Zirconium	7440-67-7	2.03	J	0.898	5.35		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.169	J	0.0661	0.220		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.88		0.0661	0.441		2
06126	Barium	7440-39-3	132		0.119	0.441		2
06127	Beryllium	7440-41-7	0.666		0.0176	0.110		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3907 SDG#: DE039-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06128	Cadmium	7440-43-9	0.0533 J	0.0396	0.110		2
06131	Chromium	7440-47-3	24.6	0.132	0.441		2
06132	Cobalt	7440-48-4	4.65	0.0220	0.110		2
06133	Copper	7440-50-8	8.83	0.0727	0.441		2
06135	Lead	7439-92-1	8.73	0.0115	0.220		2
06138	Molybdenum	7439-98-7	0.412	0.0551	0.110		2
06139	Nickel	7440-02-0	11.0	0.110	0.441		2
06141	Selenium	7782-49-2	0.0532 J	0.0441	0.441		2
06142	Silver	7440-22-4	0.0480 J	0.0132	0.110		2
06145	Thallium	7440-28-0	0.352	0.0330	0.110		2
06148	Vanadium	7440-62-2	50.1	0.0242	0.110		2
06149	Zinc	7440-66-6	49.0	0.617	3.30		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0063 J	0.0032	0.111		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.0	0.89	1.1		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.0 U	10.0	33.4		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22 U	0.22	1.1		1
	ASTM D1498		**mV**	**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	381	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.08	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	10.1	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3907 SDG#: DE039-07

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-140-SA5C-SB-3.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010 21:16	Laura M Krieger	0.94
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103511AA	12/17/2010 18:19	Jason M Long	23.02
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034923319	12/15/2010 22:39	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 14:55	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 21:35	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:38	Lois E Hiltz	n.a.
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 22:26	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:29	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 12:33	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164947
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3907 SDG#: DE039-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:33	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:33	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:33	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:15	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 01:53	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 17:35	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 14:54	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3908 SDG#: DE039-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	76	U	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	760	U	760	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	76	U	76	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3908 SDG#: DE039-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	1.0	J	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21		1
10138	Chrysene	218-01-9	1.1	J	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	10	J	6.9	21		1
10138	Fluoranthene	206-44-0	1.2	J	0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9		1
10138	Naphthalene	91-20-3	1.5	J	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21		1
10138	Phenanthrene	85-01-8	1.5	J	0.76	1.9		1
10138	Pyrene	129-00-0	0.95	J	0.76	1.9		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1		1
10401	Dalapon	75-99-0	5.0	U	5.0	10		1
10401	2,4-DB	94-82-6	11	U	11	11		1
10401	Dicamba	1918-00-9	1.0	J	0.46	1.4		1
10401	Dinoseb	88-85-7	0.92	U	0.92	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U	0.92	1.9		1
10401	MCPA	94-74-6	87	U	87	290		1
10401	MCPP (Mecoprop)	93-65-2	86	U	86	290		1
10401	2,4,5-T	93-76-5	0.094	U	0.094	0.19		1
10401	2,4,5-TP	93-72-1	0.086	U	0.086	0.19		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3908 SDG#: DE039-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	Due to interfering peaks on the chromatogram, the values reported for 2,4-DB represent the lowest reporting limits attainable.							
Perchlorate	**SW-846 6850 1/2007**		ug/kg		ug/kg	ug/kg	ug/kg	
06557	6a Perchlorate EPA 6850	14797-73-0	2.4	U	2.4	5.7		1
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.38	U	0.38	0.95		5
01363	Alpha BHC	319-84-6	0.19	U	0.19	0.95		5
01363	Beta BHC	319-85-7	0.34	U	0.34	0.95		5
01363	Gamma BHC - Lindane	58-89-9	0.19	U	0.19	0.95		5
01363	Chlordane	57-74-9	4.6	U	4.6	19		5
01363	p,p-DDD	72-54-8	0.64	U	0.64	1.9		5
01363	p,p-DDE	72-55-9	0.68	U	0.68	1.9		5
01363	p,p-DDT	50-29-3	1.9	U	1.9	1.9		5
01363	Delta BHC	319-86-8	0.93	J	0.21	0.95		5
01363	Dieldrin	60-57-1	0.65	U	0.65	1.9		5
01363	Endosulfan I	959-98-8	0.25	U	0.25	0.95		5
01363	Endosulfan II	33213-65-9	0.38	U	0.38	1.9		5
01363	Endosulfan Sulfate	1031-07-8	0.94	U	0.94	1.9		5
01363	Endrin	72-20-8	0.38	U	0.38	1.9		5
01363	Endrin Aldehyde	7421-93-4	0.99	U	0.99	1.9		5
01363	Endrin Ketone	53494-70-5	0.38	U	0.38	1.9		5
01363	Heptachlor	76-44-8	0.39	J	0.34	0.95		5
01363	Heptachlor Epoxide	1024-57-3	0.62	U	0.62	0.95		5
01363	Methoxychlor	72-43-5	3.1	U	3.1	9.5		5
01363	Mirex	2385-85-5	2.5	U	2.5	2.5		5
01363	Toxaphene	8001-35-2	13	U	13	38		5
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	3.1	J	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.57	U	0.57	1.9		1
10225	PCB-1232	11141-16-5	0.60	U	0.60	1.9		1
10225	PCB-1242	53469-21-9	0.57	U	0.57	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	2.4		0.38	1.9		1
10225	PCB-1260	11096-82-5	1.5	J	0.38	1.9		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
	The stated QC limits are advisory only until sufficient data points							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3908 SDG#: DE039-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,500		5.66	22.5		1
07914	Boron	7440-42-8	3.73	J	1.00	5.62		1
01650	Calcium	7440-70-2	3,960		6.89	22.5		1
01654	Iron	7439-89-6	22,600		5.30	22.5		1
01656	Lithium	7439-93-2	24.5		0.25	2.2		1
01657	Magnesium	7439-95-4	5,470		2.86	11.2		1
06958	Manganese	7439-96-5	309		0.0877	0.562		1
10145	Phosphorus	7723-14-0	434		0.630	11.2		1
01662	Potassium	7440-09-7	3,150		20.2	56.2		1
01667	Sodium	7440-23-5	68.9	J	41.9	112		1
07968	Strontium	7440-24-6	15.2		0.0697	0.562		1
06969	Tin	7440-31-5	2.66	J	1.12	11.2		1
06970	Titanium	7440-32-6	1,350		0.427	1.12		1
10146	Zirconium	7440-67-7	1.51	J	0.944	5.62		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.194	J	0.0668	0.223		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.96		0.0668	0.445		2
06126	Barium	7440-39-3	99.6		0.120	0.445		2
06127	Beryllium	7440-41-7	0.455		0.0178	0.111		2
06128	Cadmium	7440-43-9	0.251		0.0401	0.111		2
06131	Chromium	7440-47-3	21.8		0.134	0.445		2
06132	Cobalt	7440-48-4	7.26		0.0223	0.111		2
06133	Copper	7440-50-8	10.3		0.0735	0.445		2
06135	Lead	7439-92-1	16.7		0.0116	0.223		2
06138	Molybdenum	7439-98-7	0.570		0.0557	0.111		2
06139	Nickel	7440-02-0	14.2		0.111	0.445		2
06141	Selenium	7782-49-2	0.206	J	0.0445	0.445		2
06142	Silver	7440-22-4	0.0600	J	0.0134	0.111		2
06145	Thallium	7440-28-0	0.300		0.0334	0.111		2
06148	Vanadium	7440-62-2	48.1		0.0245	0.111		2
06149	Zinc	7440-66-6	82.8		0.623	3.34		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0121	J	0.0033	0.114		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3		0.92	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.4		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23	U	0.23	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3908 SDG#: DE039-08

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	463	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	6.78	0.0100	0.0100		1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	12.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011	15:30	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011	22:09	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010	07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010	07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010	15:15	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011	17:51	Michele D Hamilton	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103500020A	12/21/2010	18:03	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010	20:49	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010	22:45	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010	07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010	02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010	01:40	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3908 SDG#: DE039-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103500020A	12/17/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:32	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 12:36	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:36	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:36	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:36	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:16	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 02:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 18:00	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 15:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164948
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3908 SDG#: DE039-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164949
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3909 SDG#: DE039-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	560		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U	190	560		1
04688	Benzyl alcohol	100-51-6	190	U	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190		1
04688	4-Chloroaniline	106-47-8	75	U	75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560		1
04688	2,4-Dinitrophenol	51-28-5	750	U	750	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	37	U	37	190		1
04688	4-Methylphenol	106-44-5	37	U	37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	37	U	37	190		1
04688	4-Nitroaniline	100-01-6	75	U	75	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	560		1
04688	Phenol	108-95-2	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164949
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3909 SDG#: DE039-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.75	U	0.75	1.9		1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.9		1
10138	Anthracene	120-12-7	0.37	U	0.37	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.75	U	0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.75	U	0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	1.3	J	0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U	0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U	0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.7	U	6.7	20		1
10138	Di-n-butylphthalate	84-74-2	6.7	U	6.7	20		1
10138	Chrysene	218-01-9	1.4	J	0.37	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U	0.75	1.9		1
10138	Diethylphthalate	84-66-2	6.7	U	6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7	U	6.7	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	8.4	J	6.7	20		1
10138	Fluoranthene	206-44-0	1.1	J	0.75	1.9		1
10138	Fluorene	86-73-7	0.75	U	0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	U	0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.75	U	0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.75	U	0.75	1.9		1
10138	Naphthalene	91-20-3	1.6	J	0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U	0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.7	U	6.7	20		1
10138	Phenanthrene	85-01-8	1.6	J	0.75	1.9		1
10138	Pyrene	129-00-0	1.1	J	0.75	1.9		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0		1
10401	Dalapon	75-99-0	4.9	U	4.9	10		1
10401	2,4-DB	94-82-6	14		0.70	1.9		1
10401	Dicamba	1918-00-9	0.69	J	0.45	1.3		1
10401	Dinoseb	88-85-7	0.90	U	0.90	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U	0.90	1.9		1
10401	MCPA	94-74-6	85	U	85	280		1
10401	MCPP (Mecoprop)	93-65-2	84	U	84	280		1
10401	2,4,5-T	93-76-5	0.092	U	0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.084	U	0.084	0.19		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164949
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3909 SDG#: DE039-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.37	U	0.37	0.93		5
01363	Alpha BHC	319-84-6	0.19	U	0.19	0.93		5
01363	Beta BHC	319-85-7	0.34	U	0.34	0.93		5
01363	Gamma BHC - Lindane	58-89-9	0.19	U	0.19	0.93		5
01363	Chlordane	57-74-9	4.5	U	4.5	19		5
01363	p,p-DDD	72-54-8	0.43	U	0.43	1.9		5
01363	p,p-DDE	72-55-9	0.55	U	0.55	1.9		5
01363	p,p-DDT	50-29-3	1.5	U	1.5	1.9		5
01363	Delta BHC	319-86-8	0.26	J	0.20	0.93		5
01363	Dieldrin	60-57-1	0.55	U	0.55	1.9		5
01363	Endosulfan I	959-98-8	0.25	U	0.25	0.93		5
01363	Endosulfan II	33213-65-9	0.40	U	0.40	1.9		5
01363	Endosulfan Sulfate	1031-07-8	0.37	U	0.37	1.9		5
01363	Endrin	72-20-8	0.37	U	0.37	1.9		5
01363	Endrin Aldehyde	7421-93-4	1.3	U	1.3	1.9		5
01363	Endrin Ketone	53494-70-5	0.37	U	0.37	1.9		5
01363	Heptachlor	76-44-8	0.56	J	0.34	0.93		5
01363	Heptachlor Epoxide	1024-57-3	0.19	U	0.19	0.93		5
01363	Methoxychlor	72-43-5	1.9	U	1.9	9.3		5
01363	Mirex	2385-85-5	0.77	U	0.77	1.9		5
01363	Toxaphene	8001-35-2	12	U	12	37		5

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9		1
10225	PCB-1232	11141-16-5	0.58	U	0.58	1.9		1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9		1
10225	PCB-1254	11097-69-1	1.4	J	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.70	J	0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9		1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,800		5.47	21.8		1
07914	Boron	7440-42-8	4.10	J	0.969	5.44		1
01650	Calcium	7440-70-2	4,000		6.67	21.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164949
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3909 SDG#: DE039-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01654	Iron	7439-89-6	19,900		5.13	21.8		1
01656	Lithium	7439-93-2	22.7		0.24	2.2		1
01657	Magnesium	7439-95-4	5,070		2.76	10.9		1
06958	Manganese	7439-96-5	297		0.0849	0.544		1
10145	Phosphorus	7723-14-0	405		0.610	10.9		1
01662	Potassium	7440-09-7	3,290		19.6	54.4		1
01667	Sodium	7440-23-5	67.3	J	40.6	109		1
07968	Strontium	7440-24-6	15.5		0.0675	0.544		1
06969	Tin	7440-31-5	2.38	J	1.09	10.9		1
06970	Titanium	7440-32-6	1,250		0.414	1.09		1
10146	Zirconium	7440-67-7	1.16	J	0.914	5.44		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.235		0.0666	0.222		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.07		0.0666	0.444		2
06126	Barium	7440-39-3	122		0.120	0.444		2
06127	Beryllium	7440-41-7	0.472		0.0178	0.111		2
06128	Cadmium	7440-43-9	0.216		0.0400	0.111		2
06131	Chromium	7440-47-3	23.2		0.133	0.444		2
06132	Cobalt	7440-48-4	7.05		0.0222	0.111		2
06133	Copper	7440-50-8	10.5		0.0733	0.444		2
06135	Lead	7439-92-1	14.2		0.0115	0.222		2
06138	Molybdenum	7439-98-7	0.678		0.0555	0.111		2
06139	Nickel	7440-02-0	14.0		0.111	0.444		2
06141	Selenium	7782-49-2	0.313	J	0.0444	0.444		2
06142	Silver	7440-22-4	0.0467	J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.357		0.0333	0.111		2
06148	Vanadium	7440-62-2	48.9		0.0244	0.111		2
06149	Zinc	7440-66-6	93.4		0.622	3.33		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0082	J	0.0031	0.109		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.90	U	0.90	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1	U	10.1	33.6		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	444		10.0	10.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164949
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3909 SDG#: DE039-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.02	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	10.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 16:05	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 22:43	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 16:37	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 18:19	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010 21:03	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 23:03	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164949
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3909 SDG#: DE039-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:36	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 12:39	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/28/2010 17:37	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:39	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:39	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:39	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:17	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 02:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 18:24	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 15:26	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3910 SDG#: DE039-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	540		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	540		1
04688	Benzyl alcohol	100-51-6	180	U	180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	72	U	72	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540		1
04688	2,4-Dinitrophenol	51-28-5	720	U	720	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	72	U	72	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	72	U	72	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	540		1
04688	Phenol	108-95-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3910 SDG#: DE039-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.72	J	0.36	1.8		1
10138	Anthracene	120-12-7	0.68	J	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	1.2	J	0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.4	J	0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	4.7		0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.2	J	0.72	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	2.1		0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	19		1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	19		1
10138	Chrysene	218-01-9	5.6		0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	19		1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	20		6.5	19		1
10138	Fluoranthene	206-44-0	16		0.72	1.8		1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.1	J	0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	1.4	J	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	1.6	J	0.72	1.8		1
10138	Naphthalene	91-20-3	2.6		0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	19		1
10138	Phenanthrene	85-01-8	16		0.72	1.8		1
10138	Pyrene	129-00-0	10		0.72	1.8		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9		1
10401	Dalapon	75-99-0	4.8	U	4.8	9.7		1
10401	2,4-DB	94-82-6	14	U	14	14		1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3		1
10401	Dinoseb	88-85-7	0.87	U	0.87	2.6		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87	U	0.87	1.8		1
10401	MCPA	94-74-6	1,800		82	270		1
10401	MCPP (Mecoprop)	93-65-2	81	U	81	270		1
10401	2,4,5-T	93-76-5	0.38		0.089	0.18		1
10401	2,4,5-TP	93-72-1	0.84	U	0.84	0.84		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3910 SDG#: DE039-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4,5-TP and 2,4-DB.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.71	U	0.71	1.8		10
01363	Alpha BHC	319-84-6	0.37	U	0.37	1.8		10
01363	Beta BHC	319-85-7	0.65	U	0.65	1.8		10
01363	Gamma BHC - Lindane	58-89-9	2.7		0.37	1.8		10
01363	Chlordane	57-74-9	8.7	U	8.7	37		10
01363	p,p-DDD	72-54-8	0.71	U	0.71	3.7		10
01363	p,p-DDE	72-55-9	0.96	J	0.71	3.7		10
01363	p,p-DDT	50-29-3	1.6	J	0.71	3.7		10
01363	Delta BHC	319-86-8	2.6		0.39	1.8		10
01363	Dieldrin	60-57-1	0.71	U	0.71	3.7		10
01363	Endosulfan I	959-98-8	0.48	U	0.48	1.8		10
01363	Endosulfan II	33213-65-9	0.71	U	0.71	3.7		10
01363	Endosulfan Sulfate	1031-07-8	0.71	U	0.71	3.7		10
01363	Endrin	72-20-8	0.71	U	0.71	3.7		10
01363	Endrin Aldehyde	7421-93-4	1.8	J	0.71	3.7		10
01363	Endrin Ketone	53494-70-5	0.71	U	0.71	3.7		10
01363	Heptachlor	76-44-8	0.65	U	0.65	1.8		10
01363	Heptachlor Epoxide	1024-57-3	0.37	U	0.37	1.8		10
01363	Methoxychlor	72-43-5	3.7	U	3.7	18		10
01363	Mirex	2385-85-5	0.71	U	0.71	3.7		10
01363	Toxaphene	8001-35-2	24	U	24	71		10
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	22	U	22	71		20
10225	Aroclor 5442	12642-23-8	22	U	22	71		20
10225	Aroclor 5460	11126-42-4	22	U	22	71		20
10225	PCB-1016	12674-11-2	7.1	U	7.1	37		20
10225	PCB-1221	11104-28-2	11	U	11	37		20
10225	PCB-1232	11141-16-5	11	U	11	37		20
10225	PCB-1242	53469-21-9	11	U	11	37		20
10225	PCB-1248	12672-29-6	7.1	U	7.1	37		20
10225	PCB-1254	11097-69-1	7.1	U	7.1	37		20
10225	PCB-1260	11096-82-5	7.1	U	7.1	37		20
10225	PCB-1262	37324-23-5	7.1	U	7.1	37		20
10225	PCB-1268	11100-14-4	7.1	U	7.1	37		20
	Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3910 SDG#: DE039-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals		**SW-846 6010B**	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,800		5.34	21.2		1
07914	Boron	7440-42-8	4.54	J	0.944	5.31		1
01650	Calcium	7440-70-2	3,690		6.50	21.2		1
01654	Iron	7439-89-6	19,400		5.00	21.2		1
01656	Lithium	7439-93-2	24.1		0.23	2.1		1
01657	Magnesium	7439-95-4	4,750		2.70	10.6		1
06958	Manganese	7439-96-5	293		0.0828	0.531		1
10145	Phosphorus	7723-14-0	390		0.594	10.6		1
01662	Potassium	7440-09-7	3,120		19.1	53.1		1
01667	Sodium	7440-23-5	79.9	J	39.6	106		1
07968	Strontium	7440-24-6	16.3		0.0658	0.531		1
06969	Tin	7440-31-5	2.34	J	1.06	10.6		1
06970	Titanium	7440-32-6	1,200		0.403	1.06		1
10146	Zirconium	7440-67-7	0.900	J	0.891	5.31		1
		SW-846 6020	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.246		0.0637	0.212		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.23		0.0637	0.424		2
06126	Barium	7440-39-3	110		0.115	0.424		2
06127	Beryllium	7440-41-7	0.438		0.0170	0.106		2
06128	Cadmium	7440-43-9	0.358		0.0382	0.106		2
06131	Chromium	7440-47-3	22.4		0.127	0.424		2
06132	Cobalt	7440-48-4	8.04		0.0212	0.106		2
06133	Copper	7440-50-8	9.68		0.0700	0.424		2
06135	Lead	7439-92-1	10.5		0.0110	0.212		2
06138	Molybdenum	7439-98-7	0.611		0.0531	0.106		2
06139	Nickel	7440-02-0	12.6		0.106	0.424		2
06141	Selenium	7782-49-2	0.184	J	0.0424	0.424		2
06142	Silver	7440-22-4	0.0842	J	0.0127	0.106		2
06145	Thallium	7440-28-0	0.377		0.0318	0.106		2
06148	Vanadium	7440-62-2	44.8		0.0233	0.106		2
06149	Zinc	7440-66-6	99.0		0.594	3.18		2
		SW-846 7471A	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0220	J	0.0029	0.102		1
Wet Chemistry		**EPA 300.0**	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.1		0.87	1.1		1
		EPA 314.0	**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7	U	9.7	32.5		1
		SW-846 7199	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3910 SDG#: DE039-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.	n.a.	453		10.0	10.0		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.07		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3 "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.	n.a.	7.6		0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 16:40	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011 23:18	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 17:04	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 18:46	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010 21:33	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010 23:22	Lindsey K Lafferty	20
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3910 SDG#: DE039-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:40	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 12:42	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/28/2010 17:40	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:42	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:42	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:42	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:18	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 02:35	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 18:48	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 15:42	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164950
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3910 SDG#: DE039-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3911 SDG#: DE039-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	530		1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U	180	530		1
04688	Benzyl alcohol	100-51-6	180	U	180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180		1
04688	4-Chloroaniline	106-47-8	70	U	70	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530		1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	35	U	35	180		1
04688	4-Methylphenol	106-44-5	35	U	35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	35	U	35	180		1
04688	4-Nitroaniline	100-01-6	70	U	70	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	530		1
04688	Phenol	108-95-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3911 SDG#: DE039-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8		1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.70	U	0.70	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.70	U	0.70	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.70	U	0.70	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.70	U	0.70	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.70	U	0.70	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19		1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19		1
10138	Chrysene	218-01-9	0.35	U	0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U	0.70	1.8		1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19		1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	32		6.3	19		1
10138	Fluoranthene	206-44-0	0.70	U	0.70	1.8		1
10138	Fluorene	86-73-7	0.70	U	0.70	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	U	0.70	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.70	U	0.70	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.70	U	0.70	1.8		1
10138	Naphthalene	91-20-3	0.70	U	0.70	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19		1
10138	Phenanthrene	85-01-8	0.70	U	0.70	1.8		1
10138	Pyrene	129-00-0	0.70	U	0.70	1.8		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC was observed. Comparable data was not oberserved between the two extractions. The data reported here is from the initial extraction of the sample.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8		1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5		1
10401	2,4-DB	94-82-6	12	U	12	12		1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3		1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8		1
10401	MCPA	94-74-6	80	U	80	260		1
10401	MCPP (Mecoprop)	93-65-2	79	U	79	260		1
10401	2,4,5-T	93-76-5	0.11	U	0.11	0.18		1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3911 SDG#: DE039-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	statistical limits of 0-36%, the data is reported.							
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
	Due to interfering peaks on the chromatogram, the values reported for 2,4-DB and 2,4,5-T represent the lowest reporting limits attainable.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18		1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18		1
01363	Beta BHC	319-85-7	0.12	U	0.12	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18		1
01363	Chlordane	57-74-9	0.84	U	0.84	3.6		1
01363	p,p-DDD	72-54-8	0.13	U	0.13	0.36		1
01363	p,p-DDE	72-55-9	30		1.4	7.2		20
01363	p,p-DDT	50-29-3	1.8	U	1.8	1.8		1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18		1
01363	Dieldrin	60-57-1	0.30	U	0.30	0.36		1
01363	Endosulfan I	959-98-8	0.064	U	0.064	0.18		1
01363	Endosulfan II	33213-65-9	0.30	U	0.30	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36		1
01363	Endrin	72-20-8	0.070	U	0.070	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.25	U	0.25	0.36		1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36		1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.18	U	0.18	0.18		1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8		1
01363	Mirex	2385-85-5	0.24	U	0.24	0.36		1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0		1
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5		1
10225	Aroclor 5460	11126-42-4	22		1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8		1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8		1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8		1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8		1
10225	PCB-1254	11097-69-1	21		0.35	1.8		1
10225	PCB-1260	11096-82-5	3.1		0.35	1.8		1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8		1
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3911 SDG#: DE039-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals		**SW-846 6010B**	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,000		5.21	20.7		1
07914	Boron	7440-42-8	2.74	J	0.921	5.18		1
01650	Calcium	7440-70-2	3,340		6.35	20.7		1
01654	Iron	7439-89-6	28,000		9.75	41.4		2
01656	Lithium	7439-93-2	27.9		0.23	2.1		1
01657	Magnesium	7439-95-4	5,570		2.63	10.4		1
06958	Manganese	7439-96-5	375		0.0808	0.518		1
10145	Phosphorus	7723-14-0	795		0.580	10.4		1
01662	Potassium	7440-09-7	5,670		18.6	51.8		1
01667	Sodium	7440-23-5	89.2	J	38.6	104		1
07968	Strontium	7440-24-6	24.6		0.0642	0.518		1
06969	Tin	7440-31-5	2.99	J	1.04	10.4		1
06970	Titanium	7440-32-6	1,510		0.393	1.04		1
10146	Zirconium	7440-67-7	1.36	J	0.870	5.18		1
		SW-846 6020	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.392		0.0621	0.207		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.40		0.0621	0.414		2
06126	Barium	7440-39-3	120		0.112	0.414		2
06127	Beryllium	7440-41-7	0.893		0.0166	0.104		2
06128	Cadmium	7440-43-9	0.489		0.0373	0.104		2
06131	Chromium	7440-47-3	37.2		0.124	0.414		2
06132	Cobalt	7440-48-4	9.90		0.0207	0.104		2
06133	Copper	7440-50-8	21.3		0.0683	0.414		2
06135	Lead	7439-92-1	14.3		0.0108	0.207		2
06138	Molybdenum	7439-98-7	1.26		0.0518	0.104		2
06139	Nickel	7440-02-0	23.4		0.104	0.414		2
06141	Selenium	7782-49-2	0.210	J	0.0414	0.414		2
06142	Silver	7440-22-4	0.414		0.0124	0.104		2
06145	Thallium	7440-28-0	0.522		0.0311	0.104		2
06148	Vanadium	7440-62-2	63.6		0.0228	0.104		2
06149	Zinc	7440-66-6	146		0.580	3.11		2
		SW-846 7471A	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0113	J	0.0029	0.103		1
Wet Chemistry		**EPA 300.0**	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.84	U	0.84	1.1		1
		EPA 314.0	**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.7		1
		SW-846 7199	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3911 SDG#: DE039-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.1		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.	n.a.	496		10.0	10.0		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.77		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3 "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.	n.a.	5.3		0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011	17:15	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/04/2011	23:53	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010	07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010	07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010	17:32	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011	19:14	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010	21:46	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	01/13/2011	00:27	Jamie L Brillhart	20
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010	23:41	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010	07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010	02:00	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3911 SDG#: DE039-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 20:54	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:44	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/28/2010 17:49	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/28/2010 17:49	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:45	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:45	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:45	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:22	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 02:50	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 19:12	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 15:58	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164951
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3911 SDG#: DE039-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164952
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3912 SDG#: DE039-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	170	U	170	520		1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500		1
04688	Benzoic acid	65-85-0	170	U	170	520		1
04688	Benzyl alcohol	100-51-6	170	U	170	520		1
04688	4-Bromophenyl-phenylether	101-55-3	17	U	17	170		1
04688	Carbazole	86-74-8	17	U	17	170		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	170		1
04688	4-Chloroaniline	106-47-8	70	U	70	170		1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U	17	170		1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U	17	170		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U	17	170		1
04688	2-Chloronaphthalene	91-58-7	17	U	17	170		1
04688	2-Chlorophenol	95-57-8	17	U	17	170		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	170		1
04688	Dibenzofuran	132-64-9	17	U	17	170		1
04688	1,2-Dichlorobenzene	95-50-1	17	U	17	170		1
04688	1,3-Dichlorobenzene	541-73-1	17	U	17	170		1
04688	1,4-Dichlorobenzene	106-46-7	17	U	17	170		1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U	100	350		1
04688	2,4-Dichlorophenol	120-83-2	17	U	17	170		1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	170		1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	170		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U	170	520		1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	170		1
04688	2,6-Dinitrotoluene	606-20-2	17	U	17	170		1
04688	1,2-Diphenylhydrazine	122-66-7	17	U	17	170		1
04688	Hexachlorobenzene	118-74-1	17	U	17	170		1
04688	Hexachlorobutadiene	87-68-3	70	U	70	170		1
04688	Hexachlorocyclopentadiene	77-47-4	170	U	170	520		1
04688	Hexachloroethane	67-72-1	17	U	17	170		1
04688	Isophorone	78-59-1	17	U	17	170		1
04688	2-Methylphenol	95-48-7	35	U	35	170		1
04688	4-Methylphenol	106-44-5	35	U	35	170		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	17	U	17	170		1
04688	3-Nitroaniline	99-09-2	35	U	35	170		1
04688	4-Nitroaniline	100-01-6	70	U	70	170		1
04688	Nitrobenzene	98-95-3	17	U	17	170		1
04688	2-Nitrophenol	88-75-5	17	U	17	170		1
04688	4-Nitrophenol	100-02-7	170	U	170	520		1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U	17	170		1
04688	N-Nitrosodiphenylamine	86-30-6	17	U	17	170		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	170	U	170	520		1
04688	Phenol	108-95-2	17	U	17	170		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164952
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3912 SDG#: DE039-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	17	U	17	170		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	170		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	170		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.7		1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.7		1
10138	Anthracene	120-12-7	0.35	U	0.35	1.7		1
10138	Benzo(a)anthracene	56-55-3	0.82	J	0.70	1.7		1
10138	Benzo(a)pyrene	50-32-8	0.73	J	0.70	1.7		1
10138	Benzo(b)fluoranthene	205-99-2	1.7	J	0.70	1.7		1
10138	Benzo(g,h,i)perylene	191-24-2	0.70	U	0.70	1.7		1
10138	Benzo(k)fluoranthene	207-08-9	0.70	U	0.70	1.7		1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19		1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19		1
10138	Chrysene	218-01-9	1.5	J	0.35	1.7		1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U	0.70	1.7		1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19		1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.6	J	6.3	19		1
10138	Fluoranthene	206-44-0	1.7	J	0.70	1.7		1
10138	Fluorene	86-73-7	0.70	U	0.70	1.7		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	U	0.70	1.7		1
10138	1-Methylnaphthalene	90-12-0	0.70	U	0.70	1.7		1
10138	2-Methylnaphthalene	91-57-6	0.70	U	0.70	1.7		1
10138	Naphthalene	91-20-3	0.70	U	0.70	1.7		1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.7		1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19		1
10138	Phenanthrene	85-01-8	0.75	J	0.70	1.7		1
10138	Pyrene	129-00-0	1.5	J	0.70	1.7		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC was observed. Comparable data was not oberserved between the two extractions. The data reported here is from the initial extraction of the sample.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8		1
10401	Dalapon	75-99-0	4.6	U	4.6	9.4		1
10401	2,4-DB	94-82-6	12	U	12	12		1
10401	Dicamba	1918-00-9	0.48	U	0.48	1.3		1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8		1
10401	MCPA	94-74-6	80	U	80	260		1
10401	MCPP (Mecoprop)	93-65-2	79	U	79	260		1
10401	2,4,5-T	93-76-5	0.086	U	0.086	0.18		1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164952
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3912 SDG#: DE039-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	statistical limits of 0-36%, the data is reported.							
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
	Due to interfering peaks on the chromatogram, the values reported for 2,4-DB and dicamba represent the lowest reporting limits attainable.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17		1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.17		1
01363	Beta BHC	319-85-7	0.12	J	0.063	0.17		1
01363	Gamma BHC - Lindane	58-89-9	0.065	J	0.036	0.17		1
01363	Chlordane	57-74-9	0.84	U	0.84	3.6		1
01363	p,p-DDD	72-54-8	0.095	U	0.095	0.36		1
01363	p,p-DDE	72-55-9	1.8	U	1.8	1.8		1
01363	p,p-DDT	50-29-3	0.73	U	0.73	0.73		1
01363	Delta BHC	319-86-8	0.042	J	0.038	0.17		1
01363	Dieldrin	60-57-1	0.16	U	0.16	0.36		1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17		1
01363	Endosulfan II	33213-65-9	0.069	U	0.069	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.13	U	0.13	0.36		1
01363	Endrin	72-20-8	0.069	U	0.069	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.30	U	0.30	0.36		1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.36		1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17		1
01363	Heptachlor Epoxide	1024-57-3	0.11	U	0.11	0.17		1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.7		1
01363	Mirex	2385-85-5	0.19	U	0.19	0.36		1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9		1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0	3.5		1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0	3.5		1
10225	Aroclor 5460	11126-42-4	1.0	U	1.0	3.5		1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.52	U	0.52	1.8		1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8		1
10225	PCB-1242	53469-21-9	0.52	U	0.52	1.8		1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8		1
10225	PCB-1254	11097-69-1	0.35	U	0.35	1.8		1
10225	PCB-1260	11096-82-5	0.50	J	0.35	1.8		1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8		1
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164952
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3912 SDG#: DE039-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,800		5.23	20.8		1
07914	Boron	7440-42-8	2.45	J	0.925	5.19		1
01650	Calcium	7440-70-2	3,410		6.37	20.8		1
01654	Iron	7439-89-6	28,000		4.89	20.8		1
01656	Lithium	7439-93-2	27.4		0.23	2.1		1
01657	Magnesium	7439-95-4	5,250		2.64	10.4		1
06958	Manganese	7439-96-5	364		0.0810	0.519		1
10145	Phosphorus	7723-14-0	736		0.582	10.4		1
01662	Potassium	7440-09-7	4,480		18.7	51.9		1
01667	Sodium	7440-23-5	100	J	38.8	104		1
07968	Strontium	7440-24-6	23.9		0.0644	0.519		1
06969	Tin	7440-31-5	2.93	J	1.04	10.4		1
06970	Titanium	7440-32-6	1,490		0.395	1.04		1
10146	Zirconium	7440-67-7	4.40	J	0.873	5.19		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.292		0.0623	0.208		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.68		0.0623	0.416		2
06126	Barium	7440-39-3	115		0.112	0.416		2
06127	Beryllium	7440-41-7	0.852		0.0166	0.104		2
06128	Cadmium	7440-43-9	0.387		0.0374	0.104		2
06131	Chromium	7440-47-3	34.5		0.125	0.416		2
06132	Cobalt	7440-48-4	9.55		0.0208	0.104		2
06133	Copper	7440-50-8	19.2		0.0686	0.416		2
06135	Lead	7439-92-1	16.5		0.0108	0.208		2
06138	Molybdenum	7439-98-7	1.11		0.0519	0.104		2
06139	Nickel	7440-02-0	20.6		0.104	0.416		2
06141	Selenium	7782-49-2	0.169	J	0.0416	0.416		2
06142	Silver	7440-22-4	0.342		0.0125	0.104		2
06145	Thallium	7440-28-0	0.435		0.0312	0.104		2
06148	Vanadium	7440-62-2	60.5		0.0229	0.104		2
06149	Zinc	7440-66-6	140		0.582	3.12		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0113	J	0.0030	0.104		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.84	U	0.84	1.0		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4	U	9.4	31.5		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.42	J	0.21	1.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164952
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3912 SDG#: DE039-12

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	506	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	6.82	0.0100	0.0100		1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	4.7	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011	17:50	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/05/2011	00:27	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010	07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010	07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010	17:59	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011	19:42	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010	22:01	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/28/2010	23:59	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010	07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010	02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010	01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010	19:48	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010	19:48	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010	19:48	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164952
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3912 SDG#: DE039-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:48	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/28/2010 17:52	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/28/2010 17:52	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:48	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:48	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:48	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:23	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201A	01/08/2011 03:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201A	01/06/2011 19:36	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11001243201A	01/04/2011 16:22	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007201A	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201A	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3913 SDG#: DE039-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	530		1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U	180	530		1
04688	Benzyl alcohol	100-51-6	180	U	180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180		1
04688	4-Chloroaniline	106-47-8	70	U	70	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530		1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	35	U	35	180		1
04688	4-Methylphenol	106-44-5	35	U	35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	35	U	35	180		1
04688	4-Nitroaniline	100-01-6	70	U	70	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	530		1
04688	Phenol	108-95-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3913 SDG#: DE039-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8		1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.70	U	0.70	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.70	U	0.70	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.70	U	0.70	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.70	U	0.70	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.70	U	0.70	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19		1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19		1
10138	Chrysene	218-01-9	0.35	U	0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U	0.70	1.8		1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19		1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.3	U	6.3	19		1
10138	Fluoranthene	206-44-0	0.70	U	0.70	1.8		1
10138	Fluorene	86-73-7	0.70	U	0.70	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	U	0.70	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.70	U	0.70	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.70	U	0.70	1.8		1
10138	Naphthalene	91-20-3	0.70	U	0.70	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19		1
10138	Phenanthrene	85-01-8	0.70	U	0.70	1.8		1
10138	Pyrene	129-00-0	0.70	U	0.70	1.8		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC was observed. Comparable data was not oberserved between the two extractions. The data reported here is from the initial extraction of the sample.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8		1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5		1
10401	2,4-DB	94-82-6	17	U	17	17		1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3		1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8		1
10401	MCPA	94-74-6	590		80	260		1
10401	MCPP (Mecoprop)	93-65-2	79	U	79	260		1
10401	2,4,5-T	93-76-5	0.14	U	0.14	0.18		1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3913 SDG#: DE039-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	statistical limits of 0-36%, the data is reported.							
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
	Due to interfering peaks on the chromatogram, the values reported for 2,4-DB and 2,4,5-T represent the lowest reporting limits attainable.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18		1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18		1
01363	Beta BHC	319-85-7	0.065	J	0.063	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.058	J	0.036	0.18		1
01363	Chlordane	57-74-9	8.4	U	8.4	36		10
01363	p,p-DDD	72-54-8	0.99	J	0.70	3.6		10
01363	p,p-DDE	72-55-9	210		7.0	36		100
01363	p,p-DDT	50-29-3	7.9		0.70	3.6		10
01363	Delta BHC	319-86-8	0.093	J	0.038	0.18		1
01363	Dieldrin	60-57-1	1.0	J	0.70	3.6		10
01363	Endosulfan I	959-98-8	0.46	U	0.46	1.8		10
01363	Endosulfan II	33213-65-9	0.70	U	0.70	3.6		10
01363	Endosulfan Sulfate	1031-07-8	1.8	J	0.70	3.6		10
01363	Endrin	72-20-8	0.70	U	0.70	3.6		10
01363	Endrin Aldehyde	7421-93-4	0.86	J	0.70	3.6		10
01363	Endrin Ketone	53494-70-5	0.70	U	0.70	3.6		10
01363	Heptachlor	76-44-8	0.063	U	0.063	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.36	U	0.36	1.8		10
01363	Methoxychlor	72-43-5	3.6	U	3.6	18		10
01363	Mirex	2385-85-5	0.70	U	0.70	3.6		10
01363	Toxaphene	8001-35-2	23	U	23	70		10
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	11	U	11	35		10
10225	Aroclor 5442	12642-23-8	11	U	11	35		10
10225	Aroclor 5460	11126-42-4	18	J	11	35		10
10225	PCB-1016	12674-11-2	3.5	U	3.5	18		10
10225	PCB-1221	11104-28-2	5.3	U	5.3	18		10
10225	PCB-1232	11141-16-5	5.5	U	5.5	18		10
10225	PCB-1242	53469-21-9	5.3	U	5.3	18		10
10225	PCB-1248	12672-29-6	3.5	U	3.5	18		10
10225	PCB-1254	11097-69-1	3.5	U	3.5	18		10
10225	PCB-1260	11096-82-5	7.6	U	7.6	18		10
10225	PCB-1262	37324-23-5	3.5	U	3.5	18		10
10225	PCB-1268	11100-14-4	3.5	U	3.5	18		10
	Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,800		5.11	20.3		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3913 SDG#: DE039-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07914	Boron	7440-42-8	2.49	J	0.904	5.08		1
01650	Calcium	7440-70-2	3,200		6.22	20.3		1
01654	Iron	7439-89-6	25,100		9.56	40.6		2
01656	Lithium	7439-93-2	27.3		0.22	2.0		1
01657	Magnesium	7439-95-4	5,120		2.58	10.2		1
06958	Manganese	7439-96-5	377		0.0792	0.508		1
10145	Phosphorus	7723-14-0	740		0.569	10.2		1
01662	Potassium	7440-09-7	4,580		18.3	50.8		1
01667	Sodium	7440-23-5	84.5	J	37.9	102		1
07968	Strontium	7440-24-6	24.1		0.0630	0.508		1
06969	Tin	7440-31-5	2.55	J	1.02	10.2		1
06970	Titanium	7440-32-6	1,450		0.386	1.02		1
10146	Zirconium	7440-67-7	1.62	J	0.853	5.08		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.403		0.0627	0.209		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	10.9		0.0627	0.418		2
06126	Barium	7440-39-3	120		0.113	0.418		2
06127	Beryllium	7440-41-7	1.03		0.0167	0.105		2
06128	Cadmium	7440-43-9	0.468		0.0376	0.105		2
06131	Chromium	7440-47-3	38.0		0.125	0.418		2
06132	Cobalt	7440-48-4	10.4		0.0209	0.105		2
06133	Copper	7440-50-8	21.9		0.0690	0.418		2
06135	Lead	7439-92-1	16.0		0.0109	0.209		2
06138	Molybdenum	7439-98-7	1.23		0.0523	0.105		2
06139	Nickel	7440-02-0	22.6		0.105	0.418		2
06141	Selenium	7782-49-2	0.242	J	0.0418	0.418		2
06142	Silver	7440-22-4	0.133		0.0125	0.105		2
06145	Thallium	7440-28-0	0.491		0.0314	0.105		2
06148	Vanadium	7440-62-2	64.6		0.0230	0.105		2
06149	Zinc	7440-66-6	157		0.585	3.14		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0101	J	0.0029	0.103		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.2		0.84	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.7		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.47	J	0.21	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3913 SDG#: DE039-13

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	509	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	6.56	0.0100	0.0100		1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.3	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 22:13	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/05/2011 01:02	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 18:27	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 20:09	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010 23:41	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/29/2010 23:55	Jamie L Brillhart	10
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	01/07/2011 20:16	Jamie L Brillhart	100
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/29/2010 00:18	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3913 SDG#: DE039-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 20:58	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:51	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/28/2010 17:57	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/28/2010 17:57	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:51	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:51	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:51	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:24	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201B	01/08/2011 03:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201B	01/06/2011 20:00	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 16:30	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	110070072301B	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201B	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164953
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3913 SDG#: DE039-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3914 SDG#: DE039-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	530		1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U	180	530		1
04688	Benzyl alcohol	100-51-6	180	U	180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180		1
04688	4-Chloroaniline	106-47-8	71	U	71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530		1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	35	U	35	180		1
04688	4-Methylphenol	106-44-5	35	U	35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	35	U	35	180		1
04688	4-Nitroaniline	100-01-6	71	U	71	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	530		1
04688	Phenol	108-95-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3914 SDG#: DE039-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8		1
10138	Anthracene	120-12-7	0.41	J	0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	1.8		0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.5	J	0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	4.5		0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	1.4	J	0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.4	J	0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	10	J	6.4	19		1
10138	Di-n-butylphthalate	84-74-2	7.0	J	6.4	19		1
10138	Chrysene	218-01-9	4.9		0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	110		6.4	19		1
10138	Fluoranthene	206-44-0	7.8		0.71	1.8		1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.1	J	0.71	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.86	J	0.71	1.8		1
10138	Naphthalene	91-20-3	0.98	J	0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19		1
10138	Phenanthrene	85-01-8	3.4		0.71	1.8		1
10138	Pyrene	129-00-0	5.8		0.71	1.8		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8		1
10401	Dalapon	75-99-0	4.7	U	4.7	9.5		1
10401	2,4-DB	94-82-6	39	U	39	39		1
10401	Dicamba	1918-00-9	0.42	J	0.42	1.3		1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.5		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8		1
10401	MCPA	94-74-6	3,200		81	270		1
10401	MCPP (Mecoprop)	93-65-2	80	U	80	270		1
10401	2,4,5-T	93-76-5	0.30	U	0.30	0.30		1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3914 SDG#: DE039-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. Due to interfering peaks on the chromatogram, the values reported for 2,4-DB represent the lowest reporting limits attainable. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: Dicamba and 2,4,5-T							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18		1
01363	Alpha BHC	319-84-6	0.18	U	0.18	0.18		1
01363	Beta BHC	319-85-7	0.22		0.064	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18		1
01363	Chlordane	57-74-9	3.8	U	3.8	3.8		1
01363	p,p-DDD	72-54-8	0.097	U	0.097	0.36		1
01363	p,p-DDE	72-55-9	2.4	U	2.4	2.4		1
01363	p,p-DDT	50-29-3	0.90	U	0.90	0.90		1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18		1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36		1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18		1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36		1
01363	Endrin	72-20-8	0.070	U	0.070	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.31	U	0.31	0.36		1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36		1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.12	U	0.12	0.18		1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8		1
01363	Mirex	2385-85-5	0.26	U	0.26	0.36		1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0		1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5		1
10225	Aroclor 5460	11126-42-4	9.8		1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8		1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8		1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8		1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8		1
10225	PCB-1254	11097-69-1	5.4		0.35	1.8		1
10225	PCB-1260	11096-82-5	2.7		0.35	1.8		1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3914 SDG#: DE039-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals		**SW-846 6010B**	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,700		5.13	20.4		1
07914	Boron	7440-42-8	2.87	J	0.907	5.10		1
01650	Calcium	7440-70-2	3,290		6.25	20.4		1
01654	Iron	7439-89-6	26,100		9.61	40.8		2
01656	Lithium	7439-93-2	25.0		0.22	2.0		1
01657	Magnesium	7439-95-4	5,090		2.59	10.2		1
06958	Manganese	7439-96-5	394		0.0795	0.510		1
10145	Phosphorus	7723-14-0	587		0.571	10.2		1
01662	Potassium	7440-09-7	5,080		18.4	51.0		1
01667	Sodium	7440-23-5	78.0	J	38.0	102		1
07968	Strontium	7440-24-6	25.6		0.0632	0.510		1
06969	Tin	7440-31-5	3.05	J	1.02	10.2		1
06970	Titanium	7440-32-6	1,480		0.387	1.02		1
10146	Zirconium	7440-67-7	1.38	J	0.857	5.10		1
		SW-846 6020	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.233		0.0630	0.210		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.40		0.0630	0.420		2
06126	Barium	7440-39-3	128		0.113	0.420		2
06127	Beryllium	7440-41-7	0.838		0.0168	0.105		2
06128	Cadmium	7440-43-9	0.307		0.0378	0.105		2
06131	Chromium	7440-47-3	46.1		0.126	0.420		2
06132	Cobalt	7440-48-4	10.3		0.0210	0.105		2
06133	Copper	7440-50-8	19.9		0.0693	0.420		2
06135	Lead	7439-92-1	16.6		0.0109	0.210		2
06138	Molybdenum	7439-98-7	1.16		0.0525	0.105		2
06139	Nickel	7440-02-0	27.5		0.105	0.420		2
06141	Selenium	7782-49-2	0.225	J	0.0420	0.420		2
06142	Silver	7440-22-4	0.0991	J	0.0126	0.105		2
06145	Thallium	7440-28-0	0.479		0.0315	0.105		2
06148	Vanadium	7440-62-2	59.1		0.0231	0.105		2
06149	Zinc	7440-66-6	118		0.588	3.15		2
		SW-846 7471A	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0117	J	0.0030	0.105		1
Wet Chemistry		**EPA 300.0**	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.85	U	0.85	1.1		1
		EPA 314.0	**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.8		1
		SW-846 7199	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3914 SDG#: DE039-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.1		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.	n.a.	502		10.0	10.0		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.65		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3 "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.	n.a.	5.7		0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 22:48	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/05/2011 01:36	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 18:54	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 20:37	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/30/2010 00:09	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/29/2010 00:36	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3914 SDG#: DE039-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 21:01	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 19:55	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/28/2010 18:01	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/28/2010 18:01	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/28/2010 18:01	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:54	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:54	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:54	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:25	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201B	01/08/2011 04:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201B	01/06/2011 21:36	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 16:46	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	110070072301B	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201B	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164954
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3914 SDG#: DE039-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3915 SDG#: DE039-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	580		1
04688	Benzidine	92-87-5	1,400	U	1,400	3,900		1
04688	Benzoic acid	65-85-0	190	U	190	580		1
04688	Benzyl alcohol	100-51-6	190	U	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580		1
04688	2,4-Dinitrophenol	51-28-5	770	U	770	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	39	U	39	190		1
04688	4-Methylphenol	106-44-5	39	U	39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	39	U	39	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	580		1
04688	Phenol	108-95-2	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3915 SDG#: DE039-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.77	U	0.77	1.9		1
10138	Acenaphthylene	208-96-8	0.39	U	0.39	1.9		1
10138	Anthracene	120-12-7	0.39	U	0.39	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.77	U	0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.77	U	0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.94	J	0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.77	U	0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.77	U	0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21		1
10138	Chrysene	218-01-9	0.85	J	0.39	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.77	U	0.77	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	13	J	6.9	21		1
10138	Fluoranthene	206-44-0	0.94	J	0.77	1.9		1
10138	Fluorene	86-73-7	0.77	U	0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	U	0.77	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.77	U	0.77	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.77	U	0.77	1.9		1
10138	Naphthalene	91-20-3	0.77	U	0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.77	U	0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21		1
10138	Phenanthrene	85-01-8	1.0	J	0.77	1.9		1
10138	Pyrene	129-00-0	0.77	U	0.77	1.9		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC was observed. Comparable data was not oberserved between the two extractions. The data reported here is from the initial extraction of the sample.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.2		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	8.9	U	8.9	8.9		1
10401	Dicamba	1918-00-9	1.3	J	0.46	1.4		1
10401	Dinoseb	88-85-7	0.93	U	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93	U	0.93	2.0		1
10401	MCPA	94-74-6	240	U	240	290		1
10401	MCPP (Mecoprop)	93-65-2	140	U	140	290		1
10401	2,4,5-T	93-76-5	0.095	U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.23		0.087	0.20		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3915 SDG#: DE039-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	statistical limits of 0-36%, the data is reported.							
	Due to interfering peaks on the chromatogram, the values reported for 2,4-DB represent the lowest reporting limits attainable.							
	When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPP and MCPA.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069	U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.045	U	0.045	0.19		1
01363	Chlordane	57-74-9	4.2	U	4.2	4.2		1
01363	p,p-DDD	72-54-8	0.20	U	0.20	0.39		1
01363	p,p-DDE	72-55-9	0.69	U	0.69	0.69		1
01363	p,p-DDT	50-29-3	2.2	U	2.2	2.2		1
01363	Delta BHC	319-86-8	0.24		0.042	0.19		1
01363	Dieldrin	60-57-1	0.22	U	0.22	0.39		1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.13	U	0.13	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.49		0.076	0.39		1
01363	Endrin	72-20-8	0.076	U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.61	U	0.61	0.61		1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.093	U	0.093	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.39	U	0.39	0.39		1
01363	Methoxychlor	72-43-5	1.3	U	1.3	1.9		1
01363	Mirex	2385-85-5	0.61	U	0.61	0.61		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.3	U	2.3	7.6		2
10225	Aroclor 5442	12642-23-8	2.3	U	2.3	7.6		2
10225	Aroclor 5460	11126-42-4	3.6	J	2.3	7.6		2
10225	PCB-1016	12674-11-2	0.76	U	0.76	3.9		2
10225	PCB-1221	11104-28-2	1.2	U	1.2	3.9		2
10225	PCB-1232	11141-16-5	1.2	U	1.2	3.9		2
10225	PCB-1242	53469-21-9	1.2	U	1.2	3.9		2
10225	PCB-1248	12672-29-6	6.0	U	6.0	6.0		2
10225	PCB-1254	11097-69-1	11		0.76	3.9		2
10225	PCB-1260	11096-82-5	3.1	U	3.1	3.1		2
10225	PCB-1262	37324-23-5	0.76	U	0.76	3.9		2
10225	PCB-1268	11100-14-4	0.76	U	0.76	3.9		2
	When the concentration detected on the primary and confirmation							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3915 SDG#: DE039-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: PCB-1248 and PCB-1260.							
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals		**SW-846 6010B**	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,500		5.82	23.1		1
07914	Boron	7440-42-8	4.15	J	1.03	5.79		1
01650	Calcium	7440-70-2	3,280		7.09	23.1		1
01654	Iron	7439-89-6	21,200		5.45	23.1		1
01656	Lithium	7439-93-2	24.6		0.25	2.3		1
01657	Magnesium	7439-95-4	5,510		2.94	11.6		1
06958	Manganese	7439-96-5	308		0.0903	0.579		1
10145	Phosphorus	7723-14-0	446		0.648	11.6		1
01662	Potassium	7440-09-7	3,150		20.8	57.9		1
01667	Sodium	7440-23-5	86.1	J	43.2	116		1
07968	Strontium	7440-24-6	18.0		0.0718	0.579		1
06969	Tin	7440-31-5	2.57	J	1.16	11.6		1
06970	Titanium	7440-32-6	1,250		0.440	1.16		1
10146	Zirconium	7440-67-7	1.31	J	0.972	5.79		1
		SW-846 6020	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.164	J	0.0681	0.227		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.17		0.0681	0.454		2
06126	Barium	7440-39-3	126		0.123	0.454		2
06127	Beryllium	7440-41-7	0.500		0.0182	0.113		2
06128	Cadmium	7440-43-9	0.259		0.0408	0.113		2
06131	Chromium	7440-47-3	26.8		0.136	0.454		2
06132	Cobalt	7440-48-4	7.14		0.0227	0.113		2
06133	Copper	7440-50-8	10.6		0.0749	0.454		2
06135	Lead	7439-92-1	16.2		0.0118	0.227		2
06138	Molybdenum	7439-98-7	0.731		0.0567	0.113		2
06139	Nickel	7440-02-0	15.8		0.113	0.454		2
06141	Selenium	7782-49-2	0.225	J	0.0454	0.454		2
06142	Silver	7440-22-4	0.146		0.0136	0.113		2
06145	Thallium	7440-28-0	0.347		0.0340	0.113		2
06148	Vanadium	7440-62-2	54.9		0.0250	0.113		2
06149	Zinc	7440-66-6	88.1		0.635	3.40		2
		SW-846 7471A	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0513	J	0.0032	0.111		1
Wet Chemistry		**EPA 300.0**	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.1	J	0.93	1.2		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3915 SDG#: DE039-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 314.0**		ug/kg		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4	U	10.4	34.7		1
	SW-846 7199		mg/kg		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23	U	0.23	1.2		1
	ASTM D1498		mV		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	501		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		Std. Units		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.96		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	13.6		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011	23:23	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/05/2011	02:11	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010	07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010	07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010	19:22	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011	21:05	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/30/2010	00:22	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/29/2010	00:55	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010	07:00	Joseph S Feister	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3915 SDG#: DE039-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 20:06	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 12:58	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 12:58	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 12:58	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 12:58	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:26	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201B	01/08/2011 04:43	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201B	01/06/2011 22:00	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 17:18	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	110070072301B	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201B	01/05/2011 13:20	Nancy J Shoop	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164955
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3915 SDG#: DE039-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103A	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403A	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3916 SDG#: DE039-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	580		1
04688	Benzidine	92-87-5	1,400	U	1,400	3,900		1
04688	Benzoic acid	65-85-0	190	U	190	580		1
04688	Benzyl alcohol	100-51-6	190	U	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580		1
04688	2,4-Dinitrophenol	51-28-5	770	U	770	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	47	J	19	390		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	39	U	39	190		1
04688	4-Methylphenol	106-44-5	39	U	39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	39	U	39	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	580		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3916 SDG#: DE039-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.77	U	0.77	1.9		1
10138	Acenaphthylene	208-96-8	0.39	U	0.39	1.9		1
10138	Anthracene	120-12-7	1.0	J	0.39	1.9		1
10138	Benzo(a)anthracene	56-55-3	3.1		0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	2.3		0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	5.6		0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	1.6	J	0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	1.8	J	0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	9.1	J	7.0	21		1
10138	Di-n-butylphthalate	84-74-2	7.0	U	7.0	21		1
10138	Chrysene	218-01-9	5.1		0.39	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.77	U	0.77	1.9		1
10138	Diethylphthalate	84-66-2	7.0	U	7.0	21		1
10138	Dimethylphthalate	131-11-3	7.0	U	7.0	21		1
10138	Fluoranthene	206-44-0	8.6		0.77	1.9		1
10138	Fluorene	86-73-7	0.77	U	0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.3	J	0.77	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.77	U	0.77	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.77	U	0.77	1.9		1
10138	Naphthalene	91-20-3	0.77	U	0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.77	U	0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	7.0	U	7.0	21		1
10138	Phenanthrene	85-01-8	3.9		0.77	1.9		1
10138	Pyrene	129-00-0	6.1		0.77	1.9		1

The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.2		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	1.3	U	1.3	2.0		1
10401	Dicamba	1918-00-9	0.57	J	0.46	1.4		1
10401	Dinoseb	88-85-7	0.93	U	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93	U	0.93	2.0		1
10401	MCPA	94-74-6	1,200		88	290		1
10401	MCPP (Mecoprop)	93-65-2	87	U	87	290		1
10401	2,4,5-T	93-76-5	0.20	U	0.20	0.20		1
10401	2,4,5-TP	93-72-1	0.087	U	0.087	0.20		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3916 SDG#: DE039-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: dicamba, 2,4,5-T and 2,4-DB.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.077	U	0.077	0.19		1
01363	Alpha BHC	319-84-6	0.066	J	0.039	0.19		1
01363	Beta BHC	319-85-7	0.070	U	0.070	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	0.93	U	0.93	3.9		1
01363	p,p-DDD	72-54-8	0.21	U	0.21	0.39		1
01363	p,p-DDE	72-55-9	1.9	U	1.9	1.9		1
01363	p,p-DDT	50-29-3	4.4		0.38	2.0		5
01363	Delta BHC	319-86-8	0.17	U	0.17	0.19		1
01363	Dieldrin	60-57-1	0.87	U	0.87	0.87		1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.092	U	0.092	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.44	U	0.44	0.44		1
01363	Endrin	72-20-8	0.077	U	0.077	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.64	U	0.64	0.64		1
01363	Endrin Ketone	53494-70-5	0.077	U	0.077	0.39		1
01363	Heptachlor	76-44-8	0.070	U	0.070	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.16	U	0.16	0.19		1
01363	Methoxychlor	72-43-5	0.49	U	0.49	1.9		1
01363	Mirex	2385-85-5	0.42	U	0.42	0.42		1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.7		1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.3	U	2.3	7.7		2
10225	Aroclor 5442	12642-23-8	2.3	U	2.3	7.7		2
10225	Aroclor 5460	11126-42-4	22		2.3	7.7		2
10225	PCB-1016	12674-11-2	0.77	U	0.77	3.9		2
10225	PCB-1221	11104-28-2	1.2	U	1.2	3.9		2
10225	PCB-1232	11141-16-5	1.2	U	1.2	3.9		2
10225	PCB-1242	53469-21-9	1.2	U	1.2	3.9		2
10225	PCB-1248	12672-29-6	17		0.77	3.9		2
10225	PCB-1254	11097-69-1	18		0.77	3.9		2
10225	PCB-1260	11096-82-5	12		0.77	3.9		2
10225	PCB-1262	37324-23-5	0.77	U	0.77	3.9		2
10225	PCB-1268	11100-14-4	0.77	U	0.77	3.9		2
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3916 SDG#: DE039-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals		**SW-846 6010B**	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,500		5.78	23.0		1
07914	Boron	7440-42-8	4.12	J	1.02	5.74		1
01650	Calcium	7440-70-2	3,130		7.04	23.0		1
01654	Iron	7439-89-6	22,200		5.41	23.0		1
01656	Lithium	7439-93-2	25.7		0.25	2.3		1
01657	Magnesium	7439-95-4	4,510		2.92	11.5		1
06958	Manganese	7439-96-5	340		0.0896	0.574		1
10145	Phosphorus	7723-14-0	437		0.643	11.5		1
01662	Potassium	7440-09-7	3,830		20.7	57.4		1
01667	Sodium	7440-23-5	112	J	42.8	115		1
07968	Strontium	7440-24-6	20.6		0.0712	0.574		1
06969	Tin	7440-31-5	2.97	J	1.15	11.5		1
06970	Titanium	7440-32-6	1,290		0.436	1.15		1
10146	Zirconium	7440-67-7	0.965	U	0.965	5.74		1
		SW-846 6020	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.128	J	0.0689	0.230		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.61		0.0689	0.459		2
06126	Barium	7440-39-3	150		0.124	0.459		2
06127	Beryllium	7440-41-7	0.666		0.0184	0.115		2
06128	Cadmium	7440-43-9	0.260		0.0413	0.115		2
06131	Chromium	7440-47-3	24.3		0.138	0.459		2
06132	Cobalt	7440-48-4	7.27		0.0230	0.115		2
06133	Copper	7440-50-8	11.3		0.0758	0.459		2
06135	Lead	7439-92-1	19.5		0.0119	0.230		2
06138	Molybdenum	7439-98-7	0.940		0.0574	0.115		2
06139	Nickel	7440-02-0	15.0		0.115	0.459		2
06141	Selenium	7782-49-2	0.177	J	0.0459	0.459		2
06142	Silver	7440-22-4	0.575		0.0138	0.115		2
06145	Thallium	7440-28-0	0.465		0.0345	0.115		2
06148	Vanadium	7440-62-2	46.8		0.0253	0.115		2
06149	Zinc	7440-66-6	105		0.643	3.45		2
		SW-846 7471A	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.614		0.0033	0.114		1
Wet Chemistry		**EPA 300.0**	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.7		0.93	1.2		1
		EPA 314.0	**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4	U	10.4	34.8		1
		SW-846 7199	**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3916 SDG#: DE039-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23	U	0.23	1.2		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.	n.a.	422		10.0	10.0		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.28		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3 "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.	n.a.	13.8		0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/14/2011 23:57	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/05/2011 02:45	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	12/29/2010 19:50	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103570025A	01/05/2011 21:33	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	12/30/2010 00:37	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103510029A	01/07/2011 20:31	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/29/2010 01:13	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103510029A	12/20/2010 07:00	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3916 SDG#: DE039-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103570025A	12/27/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 20:10	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 13:07	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/28/2010 18:06	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 13:07	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 13:07	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 13:07	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:27	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201B	01/08/2011 04:57	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201B	01/06/2011 22:24	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 17:34	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	110070072301B	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201B	01/05/2011 13:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103B	12/16/2010 14:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164956
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3916 SDG#: DE039-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403B	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3917 SDG#: DE039-17*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.6	U	6.6	7.9		0.87
06192	Benzene	71-43-2	0.1	U	0.1	4.0		0.87
06192	Bromobenzene	108-86-1	0.13	U	0.13	4.0		0.87
06192	Bromochloromethane	74-97-5	0.33	U	0.33	4.0		0.87
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.0		0.87
06192	Bromoform	75-25-2	0.40	U	0.40	4.0		0.87
06192	Bromomethane	74-83-9	0.25	U	0.25	4.0		0.87
06192	2-Butanone	78-93-3	1.2	U	1.2	7.9		0.87
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.0		0.87
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.0		0.87
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	4.0		0.87
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	4.0		0.87
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.0		0.87
06192	Chloroethane	75-00-3	0.13	U	0.13	4.0		0.87
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30	U	0.30	4.0		0.87
06192	Chloroform	67-66-3	0.12	U	0.12	4.0		0.87
06192	Chloromethane	74-87-3	0.33	U	0.33	4.0		0.87
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	4.0		0.87
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	4.0		0.87
06192	Chlorotrifluoroethene	79-38-9	0.50	U	0.50	5.0		0.87
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.70	U	0.70	4.0		0.87
06192	Dibromochloromethane	124-48-1	0.20	U	0.20	4.0		0.87
06192	1,2-Dibromoethane	106-93-4	0.17	U	0.17	4.0		0.87
06192	Dibromomethane	74-95-3	0.24	U	0.24	4.0		0.87
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.0		0.87
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.0		0.87
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	4.0		0.87
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.0		0.87
06192	1,1-Dichloroethane	75-34-3	0.1	U	0.1	4.0		0.87
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	4.0		0.87
06192	1,1-Dichloroethene	75-35-4	0.39	U	0.39	4.0		0.87
06192	cis-1,2-Dichloroethene	156-59-2	0.19	U	0.19	4.0		0.87
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.0		0.87
06192	1,2-Dichloropropane	78-87-5	0.17	U	0.17	4.0		0.87
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.0		0.87
06192	2,2-Dichloropropane	594-20-7	0.17	U	0.17	4.0		0.87
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	4.0		0.87
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	4.0		0.87
06192	trans-1,3-Dichloropropene	10061-02-6	0.17	U	0.17	4.0		0.87
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.0		0.87
06192	Freon 113	76-13-1	0.11	U	0.11	4.0		0.87
06192	Freon 133a	75-88-7	0.50	U	0.50	5.0		0.87
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	4.0		0.87
06192	2-Hexanone	591-78-6	1.6	U	1.6	7.9		0.87
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.0		0.87
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.0		0.87
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21	U	0.21	4.0		0.87
06192	4-Methyl-2-pentanone	108-10-1	0.39	U	0.39	7.9		0.87
06192	Methylene Chloride	75-09-2	3.3	J	0.24	4.0		0.87
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.0		0.87

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3917 SDG#: DE039-17*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.1	U	0.1	4.0		0.87
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.0		0.87
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23	U	0.23	4.0		0.87
06192	Tetrachloroethene	127-18-4	0.20	U	0.20	4.0		0.87
06192	Toluene	108-88-3	0.08	U	0.08	4.0		0.87
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	4.0		0.87
06192	1,2,4-Trichlorobenzene	120-82-1	0.18	U	0.18	4.0		0.87
06192	1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	4.0		0.87
06192	1,1,2-Trichloroethane	79-00-5	0.27	U	0.27	4.0		0.87
06192	Trichloroethene	79-01-6	0.15	U	0.15	4.0		0.87
06192	Trichlorofluoromethane	75-69-4	0.29	U	0.29	4.0		0.87
06192	1,2,3-Trichloropropane	96-18-4	0.33	U	0.33	4.0		0.87
06192	1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	4.0		0.87
06192	1,3,5-Trimethylbenzene	108-67-8	0.1	U	0.1	4.0		0.87
06192	Vinyl Chloride	75-01-4	0.20	U	0.20	4.0		0.87
06192	m+p-Xylene	179601-23-1	0.17	U	0.17	4.0		0.87
06192	o-Xylene	95-47-6	0.17	U	0.17	4.0		0.87
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.7	U	4.7	14		20.39
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	74.9		19.1	38.3		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	770	U	770	2,300		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3917 SDG#: DE039-17*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.77	U	0.77	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.77	U	0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.77	U	0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.77	U	0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.77	U	0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.77	U	0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21		1
10138	Chrysene	218-01-9	0.38	U	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.77	U	0.77	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.9	U	6.9	21		1
10138	Fluoranthene	206-44-0	0.77	U	0.77	1.9		1
10138	Fluorene	86-73-7	0.77	U	0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	U	0.77	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3917 SDG#: DE039-17*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.77	U	0.77	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.77	U	0.77	1.9		1
10138	Naphthalene	91-20-3	0.77	U	0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.77	U	0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21		1
10138	Phenanthrene	85-01-8	0.77	U	0.77	1.9		1
10138	Pyrene	129-00-0	0.77	U	0.77	1.9		1
	The recoveries of several compounds were outside of QC limits in the LCS. This sample was re-extracted outside of the method required holding time, and acceptable QC and comparable data were observed. The data reported here is from the initial extraction of the sample.							
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.1		23.81
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	86	U	86	170	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	57	U	57	170	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	340	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	340	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	57	U	57	170	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	57	U	57	170	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	57	U	57	170	10000000	1
10132	HMX	2691-41-0	140	U	140	430	10000000	1
10132	Nitrobenzene	98-95-3	57	U	57	170	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,400	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	170	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U	140	170	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	170	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,400	10000000	1
10132	RDX	121-82-4	72	U	72	170	10000000	1
10132	Tetryl	479-45-8	88	U	88	170	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3917 SDG#: DE039-17*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	1,3,5-Trinitrobenzene	99-35-4	57	U	57	170	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	57	U	57	170	10000000	1
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	690	U	690	1,700		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.57	U	0.57	2.0		1
10225	PCB-1232	11141-16-5	0.60	U	0.60	2.0		1
10225	PCB-1242	53469-21-9	0.57	U	0.57	2.0		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0		1
10225	PCB-1254	11097-69-1	1.2	J	0.38	2.0		1
10225	PCB-1260	11096-82-5	0.38	U	0.38	2.0		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.46	U	0.46	1.4		1
10199	EFH (C15-C20)	n.a.	0.46	U	0.46	1.4		1
10199	EFH (C21-C30)	n.a.	3.6		0.46	1.4		1
10199	EFH (C30 - C40)	n.a.	8.9		0.46	1.4		1
10199	EFH (C8-C11)	n.a.	0.46	U	0.46	1.4		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	570		1
10501	Isopropanol	67-63-0	110	U	110	570		1
10501	Methanol	67-56-1	160	J	110	570		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.7	U	5.7	14		1
08283	Ethylene glycol	107-21-1	5.7	U	5.7	14		1
08283	Propylene glycol	57-55-6	5.7	U	5.7	14		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3917 SDG#: DE039-17*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	2.6	U	2.6	6.0		1
10318	o-Terphenyl	84-15-1	2.6	U	2.6	6.0		1
10318	p-Terphenyl	92-94-4	2.6	U	2.6	6.0		1
	Reporting limits were raised due to limited sample volume.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,400		5.55	22.1		1
07914	Boron	7440-42-8	0.988	J	0.983	5.52		1
01650	Calcium	7440-70-2	4,230		6.77	22.1		1
01654	Iron	7439-89-6	25,900		10.4	44.2		2
01656	Lithium	7439-93-2	31.9		0.24	2.2		1
01657	Magnesium	7439-95-4	6,480		2.80	11.0		1
06958	Manganese	7439-96-5	387		0.0861	0.552		1
10145	Phosphorus	7723-14-0	537		0.618	11.0		1
01662	Potassium	7440-09-7	3,500		19.9	55.2		1
01667	Sodium	7440-23-5	133		41.2	110		1
07968	Strontium	7440-24-6	22.3		0.0684	0.552		1
06969	Tin	7440-31-5	2.92	J	1.10	11.0		1
06970	Titanium	7440-32-6	1,610		0.420	1.10		1
10146	Zirconium	7440-67-7	0.927	U	0.927	5.52		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.391		0.0662	0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	12.5		0.0662	0.442		2
06126	Barium	7440-39-3	183		0.119	0.442		2
06127	Beryllium	7440-41-7	0.913		0.0177	0.110		2
06128	Cadmium	7440-43-9	0.220		0.0397	0.110		2
06131	Chromium	7440-47-3	37.4		0.132	0.442		2
06132	Cobalt	7440-48-4	11.7		0.0221	0.110		2
06133	Copper	7440-50-8	19.2		0.0729	0.442		2
06135	Lead	7439-92-1	12.3		0.0115	0.221		2
06138	Molybdenum	7439-98-7	1.12		0.0552	0.110		2
06139	Nickel	7440-02-0	23.8		0.110	0.442		2
06141	Selenium	7782-49-2	0.268	J	0.0442	0.442		2
06142	Silver	7440-22-4	0.0336	J	0.0132	0.110		2
06145	Thallium	7440-28-0	0.657		0.0331	0.110		2
06148	Vanadium	7440-62-2	71.0		0.0243	0.110		2
06149	Zinc	7440-66-6	119		0.618	3.31		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032	U	0.0032	0.110		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.95	J	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.3	J	0.92	1.7		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3917 SDG#: DE039-17*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 314.0**		ug/kg		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.4		1
	SW-846 7199		mg/kg		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23	U	0.23	1.1		1
	SW-846 9012B		mg/kg		mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.55		1
	ASTM D1498		mV		mV	mV	mV	
01821	Oxidation Reduction Potential The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.	n.a.	423		10.0	10.0		1
	SW-846 9045C modified		Std. Units		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.41		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	%	
11624	28a Moisture Content by 160.3 "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.	n.a.	12.9		0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-060-SA5C-SB-10.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103501AA	12/16/2010 21:39	Laura M Krieger	0.87
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103511AA	12/17/2010 13:40	Jason M Long	20.39
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:46	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201034923319	12/15/2010 22:50	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201034923319	12/15/2010 22:43	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10361SLB026	01/05/2011 20:07	Timothy J Trees	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3917 SDG#: DE039-17*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLF026	01/15/2011 00:32	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLI026	01/05/2011 03:20	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10361SLB026	12/27/2010 08:15	Joseph S Feister	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLI026	12/21/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLF026	12/21/2010 07:00	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10349A34B	12/17/2010 16:02	Elizabeth J Marin	23.81
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201034923319	12/15/2010 22:42	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103550019A	12/24/2010 12:22	Michele D Hamilton	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103510021A	12/23/2010 01:22	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540019A	12/29/2010 01:32	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540019A	12/21/2010 02:00	Roman Kuropatkin	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103510021A	12/19/2010 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103550019A	12/21/2010 15:45	Kerrie A Freeburn	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103570006A	12/27/2010 16:11	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540002A	12/21/2010 00:48	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103510010A	12/21/2010 17:40	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550027A	12/24/2010 02:43	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	103570006A	12/23/2010 17:00	JoElla L Rice	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550027A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103510010A	12/17/2010 12:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	2	103540002A	12/20/2010 15:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
07914	Boron	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
01650	Calcium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
01654	Iron	SW-846 6010B	1	103515708009	12/23/2010 21:05	John P Hook	2
01656	Lithium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
06958	Manganese	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
01662	Potassium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
01667	Sodium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
07968	Strontium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
06969	Tin	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
06970	Titanium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103515708009	12/22/2010 20:13	John P Hook	1
06124	Antimony	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164957
LLI Group # 1225546
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

Submitted: 12/15/2010 09:40
Reported: 01/19/2011 11:07

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E3917 SDG#: DE039-17*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103511026004D	12/26/2010 13:10	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103511026004C	12/26/2010 13:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103511026004B	12/26/2010 13:10	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103511026004A	12/26/2010 13:10	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103515711005	12/20/2010 10:29	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103515708009	12/19/2010 20:17	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103511026004	12/17/2010 20:20	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103515711005	12/19/2010 22:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007201B	01/08/2011 05:12	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11007007201B	01/08/2011 05:12	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11005005201B	01/06/2011 22:48	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11001243201A	01/04/2011 17:50	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10361102202B	12/27/2010 20:30	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	110070072301B	01/07/2011 14:05	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11005005201B	01/05/2011 13:20	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10361102202B	12/27/2010 17:40	Erik J Frederiksen	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10350182103B	12/16/2010 14:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10350039403B	12/16/2010 14:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11001243201A	01/01/2011 07:40	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11005162401A	01/05/2011 18:13	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B103501AA	Sample number(s): 6164941-6164942,6164945-6164947,6164957									
Acetone	6.7	U	6.7	8.0	ug/kg	189	181	32-209	5	30
Benzene	0.10	U	0.10	4.0	ug/kg	105	105	80-120	0	30
Bromobenzene	0.13	U	0.13	4.0	ug/kg	93	92	79-120	1	30
Bromochloromethane	0.33	U	0.33	4.0	ug/kg	101	101	79-124	0	30
Bromodichloromethane	0.08	U	0.08	4.0	ug/kg	98	97	78-120	0	30
Bromoform	0.40	U	0.40	4.0	ug/kg	95	94	70-120	1	30
Bromomethane	0.25	U	0.25	4.0	ug/kg	76	77	32-162	2	30
2-Butanone	1.2	U	1.2	8.0	ug/kg	144	139	46-153	3	30
n-Butylbenzene	0.12	U	0.12	4.0	ug/kg	100	99	72-120	1	30
sec-Butylbenzene	0.06	U	0.06	4.0	ug/kg	99	99	75-120	0	30
tert-Butylbenzene	0.16	U	0.16	4.0	ug/kg	94	95	75-120	1	30
Carbon Tetrachloride	0.14	U	0.14	4.0	ug/kg	103	102	69-122	1	30
Chlorobenzene	0.11	U	0.11	4.0	ug/kg	98	98	80-120	0	30
Chloroethane	0.13	U	0.13	4.0	ug/kg	80	82	37-154	2	30
2-Chloroethyl Vinyl Ether	0.30	U	0.30	4.0	ug/kg	106	103	43-146	3	30
Chloroform	0.37	J	0.12	4.0	ug/kg	104	103	80-120	0	30
Chloromethane	0.33	U	0.33	4.0	ug/kg	89	90	54-132	0	30
2-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	96	96	78-120	1	30
4-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	96	95	79-120	0	30
Chlorotrifluoroethene	0.50	U	0.50	5.0	ug/kg	84	85	22-131	2	30
1,2-Dibromo-3-chloropropane	0.70	U	0.70	4.0	ug/kg	97	94	58-120	4	30
Dibromochloromethane	0.20	U	0.20	4.0	ug/kg	97	95	77-120	2	30
1,2-Dibromoethane	0.17	U	0.17	4.0	ug/kg	99	97	80-120	2	30
Dibromomethane	0.24	U	0.24	4.0	ug/kg	102	100	80-120	2	30
1,2-Dichlorobenzene	0.09	U	0.09	4.0	ug/kg	95	95	79-120	0	30
1,3-Dichlorobenzene	0.12	U	0.12	4.0	ug/kg	93	93	78-120	0	30
1,4-Dichlorobenzene	0.16	U	0.16	4.0	ug/kg	95	93	79-120	1	30
Dichlorodifluoromethane	0.12	U	0.12	4.0	ug/kg	76	75	20-120	1	30
1,1-Dichloroethane	0.10	U	0.10	4.0	ug/kg	104	104	80-120	1	30
1,2-Dichloroethane	0.15	U	0.15	4.0	ug/kg	103	102	71-129	1	30
1,1-Dichloroethene	0.39	U	0.39	4.0	ug/kg	101	100	73-123	1	30
cis-1,2-Dichloroethene	0.19	U	0.19	4.0	ug/kg	103	102	80-120	2	30
trans-1,2-Dichloroethene	0.12	U	0.12	4.0	ug/kg	102	101	79-120	0	30
1,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	104	103	80-120	1	30
1,3-Dichloropropane	0.08	U	0.08	4.0	ug/kg	100	99	80-120	1	30
2,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	102	101	72-123	1	30
1,1-Dichloropropene	0.13	U	0.13	4.0	ug/kg	104	104	77-120	1	30
cis-1,3-Dichloropropene	0.16	U	0.16	4.0	ug/kg	94	96	80-120	2	30
trans-1,3-Dichloropropene	0.17	U	0.17	4.0	ug/kg	95	94	77-120	1	30
Ethylbenzene	0.06	U	0.06	4.0	ug/kg	100	100	80-120	0	30
Freon 113	0.11	U	0.11	4.0	ug/kg	101	100	61-126	1	30
Freon 133a	0.50	U	0.50	5.0	ug/kg	85	85	78-120	1	30
Hexachlorobutadiene	0.14	U	0.14	4.0	ug/kg	90	91	57-120	1	30
2-Hexanone	1.6	U	1.6	8.0	ug/kg	95	93	45-155	3	30
Isopropylbenzene	0.06	U	0.06	4.0	ug/kg	101	100	76-120	1	30
p-Isopropyltoluene	0.11	U	0.11	4.0	ug/kg	99	100	75-120	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21	U	0.21	4.0	ug/kg	101	100	74-121	1	30
4-Methyl-2-pentanone	0.39	U	0.39	8.0	ug/kg	84	82	61-134	3	30
Methylene Chloride	1.0	J	0.24	4.0	ug/kg	99	100	76-124	1	30
n-Propylbenzene	0.07	U	0.07	4.0	ug/kg	101	101	77-120	0	30
Styrene	0.10	U	0.10	4.0	ug/kg	97	97	76-120	0	30
1,1,1,2-Tetrachloroethane	0.11	U	0.11	4.0	ug/kg	98	97	80-120	1	30
1,1,2,2-Tetrachloroethane	0.23	U	0.23	4.0	ug/kg	97	95	71-123	2	30
Tetrachloroethene	0.20	U	0.20	4.0	ug/kg	100	98	77-120	2	30
Toluene	0.08	U	0.08	4.0	ug/kg	101	100	80-120	0	30
1,2,3-Trichlorobenzene	0.14	U	0.14	4.0	ug/kg	92	92	64-120	0	30
1,2,4-Trichlorobenzene	0.18	U	0.18	4.0	ug/kg	90	91	68-120	0	30
1,1,1-Trichloroethane	0.20	U	0.20	4.0	ug/kg	103	101	71-125	2	30
1,1,2-Trichloroethane	0.27	U	0.27	4.0	ug/kg	99	96	80-120	2	30
Trichloroethene	0.15	U	0.15	4.0	ug/kg	101	100	80-120	0	30
Trichlorofluoromethane	0.29	U	0.29	4.0	ug/kg	86	85	58-133	1	30
1,2,3-Trichloropropane	0.33	U	0.33	4.0	ug/kg	99	95	71-123	4	30
1,2,4-Trimethylbenzene	0.40	U	0.40	4.0	ug/kg	98	99	79-120	1	30
1,3,5-Trimethylbenzene	0.10	U	0.10	4.0	ug/kg	98	98	78-120	0	30
Vinyl Chloride	0.20	U	0.20	4.0	ug/kg	88	88	53-120	0	30
m+p-Xylene	0.17	U	0.17	4.0	ug/kg	101	100	80-120	1	30
o-Xylene	0.17	U	0.17	4.0	ug/kg	98	96	80-120	2	30
Batch number: E103502AA	Sample number(s): 6164943-6164944									
1,4-Dioxane	0.5	U	0.5	2.0	ug/l	98		60-132		
Batch number: E103511AA	Sample number(s): 6164941-6164942,6164945-6164947,6164957									
1,4-Dioxane	5.0	U	5.0	15	ug/kg	102	101	70-130	1	30
Batch number: Y103512AA	Sample number(s): 6164944									
Acetone	6	U	6.	20	ug/l	186	190	49-234	2	30
Benzene	0.5	U	0.5	5	ug/l	96	95	79-120	1	30
Bromobenzene	1	U	1.	5	ug/l	103	103	80-120	0	30
Bromochloromethane	1	U	1.	5	ug/l	94	92	80-120	2	30
Bromodichloromethane	1	U	1.	5	ug/l	91	91	80-120	0	30
Bromoform	1	U	1.	5	ug/l	93	92	61-120	2	30
Bromomethane	1	U	1.	5	ug/l	87	79	44-120	10	30
2-Butanone	3	U	3.	10	ug/l	125	130	66-151	4	30
n-Butylbenzene	1	U	1.	5	ug/l	100	100	74-120	1	30
sec-Butylbenzene	1	U	1.	5	ug/l	107	106	78-120	1	30
tert-Butylbenzene	1	U	1.	5	ug/l	97	97	80-120	0	30
Carbon Tetrachloride	1	U	1.	5	ug/l	99	96	75-123	3	30
Chlorobenzene	0.8	U	0.8	5	ug/l	94	95	80-120	0	30
Chloroethane	1	U	1.	5	ug/l	82	75	49-129	9	30
2-Chloroethyl Vinyl Ether	2	U	2.	10	ug/l	101	102	56-129	1	30
Chloroform	0.8	U	0.8	5	ug/l	98	96	77-122	2	30
Chloromethane	1	U	1.	5	ug/l	83	81	60-129	2	30
2-Chlorotoluene	1	U	1.	5	ug/l	104	103	80-120	1	30
4-Chlorotoluene	1	U	1.	5	ug/l	99	99	80-120	0	30
Chlorotrifluoroethene	2	U	2.	5	ug/l	73	76	38-136	4	30
1,2-Dibromo-3-chloropropane	2	U	2.	5	ug/l	105	108	66-120	3	30
Dibromochloromethane	1	U	1.	5	ug/l	94	94	80-120	1	30
1,2-Dibromoethane	1	U	1.	5	ug/l	97	99	80-120	2	30
Dibromomethane	1	U	1.	5	ug/l	94	93	80-120	1	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	96	95	80-120	1	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	102	100	80-120	2	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	99	98	80-120	1	30
Dichlorodifluoromethane	2	U	2.	5	ug/l	77	72	47-120	6	30
1,1-Dichloroethane	1	U	1.	5	ug/l	98	97	79-120	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloroethane	1	U	1.	5	ug/l	96	95	70-130	1	30
1,1-Dichloroethene	0.8	U	0.8	5	ug/l	100	103	74-123	4	30
cis-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	97	96	80-120	1	30
trans-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	95	95	80-120	0	30
1,2-Dichloropropane	1	U	1.	5	ug/l	93	93	78-120	0	30
1,3-Dichloropropane	1	U	1.	5	ug/l	98	99	80-120	1	30
2,2-Dichloropropane	1	U	1.	5	ug/l	91	90	77-124	2	30
1,1-Dichloropropene	1	U	1.	5	ug/l	98	95	80-120	2	30
cis-1,3-Dichloropropene	1	U	1.	5	ug/l	87	87	80-120	0	30
trans-1,3-Dichloropropene	1	U	1.	5	ug/l	93	92	79-120	0	30
Ethylbenzene	0.8	U	0.8	5	ug/l	98	97	79-120	2	30
Freon 113	2	U	2.	10	ug/l	112	115	69-128	3	30
Freon 133a	2	U	2.	5	ug/l	98	99	77-120	2	30
Hexachlorobutadiene	2	U	2.	5	ug/l	93	96	58-120	3	30
2-Hexanone	3	U	3.	10	ug/l	116	120	65-136	3	30
Isopropylbenzene	1	U	1.	5	ug/l	96	96	77-120	1	30
p-Isopropyltoluene	1	U	1.	5	ug/l	103	102	80-120	1	30
Methyl Tertiary Butyl Ether	0.5	U	0.5	5	ug/l	94	95	76-120	1	30
4-Methyl-2-pentanone	3	U	3.	10	ug/l	97	97	70-121	0	30
Methylene Chloride	2	U	2.	5	ug/l	98	100	80-120	3	30
n-Propylbenzene	1	U	1.	5	ug/l	110	108	80-120	1	30
Styrene	1	U	1.	5	ug/l	97	95	80-120	1	30
1,1,1,2-Tetrachloroethane	1	U	1.	5	ug/l	97	97	80-120	0	30
1,1,2,2-Tetrachloroethane	1	U	1.	5	ug/l	106	107	71-120	1	30
Tetrachloroethene	0.8	U	0.8	5	ug/l	98	97	80-121	1	30
Toluene	0.7	U	0.7	5	ug/l	98	98	79-120	0	30
1,2,3-Trichlorobenzene	1	U	1.	5	ug/l	95	97	65-120	2	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	95	97	67-120	2	30
1,1,1-Trichloroethane	0.8	U	0.8	5	ug/l	98	97	75-127	1	30
1,1,2-Trichloroethane	0.8	U	0.8	5	ug/l	100	100	80-120	0	30
Trichloroethene	1	U	1.	5	ug/l	94	92	80-120	2	30
Trichlorofluoromethane	2	U	2.	5	ug/l	89	89	64-129	0	30
1,2,3-Trichloropropane	1	U	1.	5	ug/l	109	109	80-120	0	30
1,2,4-Trimethylbenzene	1	U	1.	5	ug/l	105	104	74-120	1	30
1,3,5-Trimethylbenzene	1	U	1.	5	ug/l	103	102	75-120	1	30
Vinyl Chloride	1	U	1.	5	ug/l	79	78	65-125	1	30
m+p-Xylene	0.8	U	0.8	5	ug/l	93	93	80-120	1	30
o-Xylene	0.8	U	0.8	5	ug/l	94	94	80-120	0	30
Batch number: 10350WAB026	Sample number(s): 6164944									
Aniline	1	U	1.	5	ug/l	67	66	49-101	1	30
Benzidine	20	U	20.	60	ug/l	64	62	20-109	3	30
Benzoic acid	6	U	6.	15	ug/l	30	48	10-69	44*	30
Benzyl alcohol	5	U	5.	15	ug/l	79	91	66-97	14	30
4-Bromophenyl-phenylether	1	U	1.	5	ug/l	86	107	82-117	22	30
Carbazole	1	U	1.	5	ug/l	92	110	81-114	18	30
4-Chloro-3-methylphenol	1	U	1.	5	ug/l	89	112	70-123	22	30
4-Chloroaniline	1	U	1.	5	ug/l	51	58	42-124	14	30
bis(2-Chloroethoxy)methane	1	U	1.	5	ug/l	89	109	74-124	20	30
bis(2-Chloroethyl)ether	1	U	1.	5	ug/l	90	105	77-108	16	30
bis(2-Chloroisopropyl)ether	1	U	1.	5	ug/l	92	105	62-127	13	30
2-Chloronaphthalene	2	U	2.	5	ug/l	77	81	54-132	5	30
2-Chlorophenol	1	U	1.	5	ug/l	91	109*	77-108	18	30
4-Chlorophenyl-phenylether	2	U	2.	5	ug/l	90	111	82-111	21	30
Dibenzofuran	1	U	1.	5	ug/l	91	111*	83-108	20	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	84	94	67-108	12	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	83	93	63-110	12	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	82	93	65-113	12	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
3,3'-Dichlorobenzidine	2	U	2.	5	ug/l	53	57	49-111	9	30
2,4-Dichlorophenol	1	U	1.	5	ug/l	96	117*	80-109	20	30
2,4-Dimethylphenol	3	U	3.	10	ug/l	96	117*	72-110	20	30
3,5-Dimethylphenol	3	U	3.	10	ug/l	93	117	70-130	23	30
4,6-Dinitro-2-methylphenol	5	U	5.	15	ug/l	86	102	78-119	17	30
2,4-Dinitrophenol	10	U	10.	30	ug/l	77	91	64-120	16	30
2,4-Dinitrotoluene	1	U	1.	5	ug/l	93	110	81-115	17	30
2,6-Dinitrotoluene	1	U	1.	5	ug/l	90	110	85-115	20	30
1,2-Diphenylhydrazine	1	U	1.	5	ug/l	96	118*	78-116	21	30
Hexachlorobenzene	1	U	1.	5	ug/l	88	108	81-118	20	30
Hexachlorobutadiene	1	U	1.	5	ug/l	81	92	57-124	13	30
Hexachlorocyclopentadiene	5	U	5.	15	ug/l	71	77	10-118	8	30
Hexachloroethane	1	U	1.	5	ug/l	80	91	52-113	13	30
Isophorone	1	U	1.	5	ug/l	91	114	74-117	22	30
2-Methylphenol	1	U	1.	5	ug/l	85	102*	64-101	18	30
4-Methylphenol	2	U	2.	5	ug/l	76	93	61-103	21	30
2-Nitroaniline	1	U	1.	5	ug/l	91	111	83-116	20	30
3-Nitroaniline	1	U	1.	5	ug/l	88	101	74-113	14	30
4-Nitroaniline	1	U	1.	5	ug/l	74	82	59-100	11	30
Nitrobenzene	1	U	1.	5	ug/l	90	104	75-109	14	30
2-Nitrophenol	1	U	1.	5	ug/l	91	108	86-120	18	30
4-Nitrophenol	10	U	10.	30	ug/l	44	53	16-78	19	30
N-Nitroso-di-n-propylamine	1	U	1.	5	ug/l	89	108	69-110	19	30
N-Nitrosodiphenylamine	2	U	2.	5	ug/l	91	111	67-136	20	30
Pentachlorophenol	3	U	3.	15	ug/l	75	84	53-110	12	30
Phenol	1	U	1.	5	ug/l	40	47	29-67	17	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	85	100	71-112	16	30
2,4,5-Trichlorophenol	1	U	1.	5	ug/l	90	108*	79-107	19	30
2,4,6-Trichlorophenol	1	U	1.	5	ug/l	93	110	81-113	17	30
Batch number: 10350WAH026	Sample number(s): 6164944									
Acenaphthene	0.010	U	0.010	0.050	ug/l	75	78	74-109	3	30
Acenaphthylene	0.010	U	0.010	0.050	ug/l	80	82	70-110	3	30
Anthracene	0.010	U	0.010	0.050	ug/l	77	78	66-111	1	30
Benzo(a)anthracene	0.010	U	0.010	0.050	ug/l	78	79	72-114	1	30
Benzo(a)pyrene	0.010	U	0.010	0.050	ug/l	73	79	64-115	8	30
Benzo(b)fluoranthene	0.010	U	0.010	0.050	ug/l	79	75	69-123	5	30
Benzo(g,h,i)perylene	0.010	U	0.010	0.050	ug/l	73	69	68-125	5	30
Benzo(k)fluoranthene	0.010	U	0.010	0.050	ug/l	75	71*	72-122	5	30
Butylbenzylphthalate	0.055	J	0.050	1.0	ug/l	71	73	70-130	2	30
Di-n-butylphthalate	0.050	U	0.050	1.0	ug/l	80	80	70-130	0	30
Chrysene	0.010	U	0.010	0.050	ug/l	75*	77	76-116	2	30
Dibenz(a,h)anthracene	0.010	U	0.010	0.050	ug/l	75	69*	71-125	8	30
Diethylphthalate	0.050	U	0.050	1.0	ug/l	67*	65*	70-130	3	30
Dimethylphthalate	0.050	U	0.050	1.0	ug/l	67*	71	70-130	5	30
Bis(2-Ethylhexyl)phthalate	0.050	U	0.050	1.0	ug/l	86	87	70-130	0	30
Fluoranthene	0.010	U	0.010	0.050	ug/l	78	67*	75-116	16	30
Fluorene	0.010	U	0.010	0.050	ug/l	79	78	75-114	2	30
Indeno(1,2,3-cd)pyrene	0.010	U	0.010	0.050	ug/l	74	69	69-124	7	30
1-Methylnaphthalene	0.010	U	0.010	0.050	ug/l	77	69*	71-117	11	30
2-Methylnaphthalene	0.010	U	0.010	0.050	ug/l	71*	66*	75-115	7	30
Naphthalene	0.010	U	0.010	0.050	ug/l	74	75	72-109	1	30
N-Nitrosodimethylamine	0.010	U	0.010	0.050	ug/l	59*	58*	70-130	1	30
Di-n-octylphthalate	0.050	U	0.050	1.0	ug/l	74	71	70-130	5	30
Phenanthrene	0.010	U	0.010	0.050	ug/l	77	78	76-111	2	30
Pyrene	0.010	U	0.010	0.050	ug/l	72	72	69-118	1	30
Batch number: 10354SLF026	Sample number(s): 6164941-6164942,6164945-6164957									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Aniline	170 U		170.	500	ug/kg	46		10-107		
Benzidine	1,200 U		1,200.	3,300	ug/kg	42		15-121		
Benzoic acid	170 U		170.	500	ug/kg	92		10-154		
Benzyl alcohol	170 U		170.	500	ug/kg	86		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	93		79-117		
Carbazole	17	U	17.	170	ug/kg	105		77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	100		74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	65		10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	99		70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	87		70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	88		68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	86		67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	91		72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	97		79-110		
Dibenzofuran	17	U	17.	170	ug/kg	101		79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	91		79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	87		70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	89		74-106		
3,3'-Dichlorobenzidine	100 U		100.	330	ug/kg	47		38-105		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	99		75-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	100		72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	106		70-130		
4,6-Dinitro-2-methylphenol	170 U		170.	500	ug/kg	89		53-110		
2,4-Dinitrophenol	670 U		670.	2,000	ug/kg	88		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	107		73-115		
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	105		79-115		
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	106		77-111		
bis(2-Ethylhexyl)phthalate	17	U	17.	330	ug/kg	106		75-117		
Hexachlorobenzene	17	U	17.	170	ug/kg	99		78-116		
Hexachlorobutadiene	67	U	67.	170	ug/kg	100		70-112		
Hexachlorocyclopentadiene	170 U		170.	500	ug/kg	111		46-115		
Hexachloroethane	17	U	17.	170	ug/kg	93		68-105		
Isophorone	17	U	17.	170	ug/kg	94		69-110		
2-Methylphenol	33	U	33.	170	ug/kg	88		66-110		
4-Methylphenol	33	U	33.	170	ug/kg	88		66-117		
2-Nitroaniline	17	U	17.	170	ug/kg	110		78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	94		62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	69		49-98		
Nitrobenzene	17	U	17.	170	ug/kg	102		71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	98		81-114		
4-Nitrophenol	170 U		170.	500	ug/kg	110		56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	85		63-107		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	100		67-141		
Pentachlorophenol	170 U		170.	500	ug/kg	91		35-106		
Phenol	17	U	17.	170	ug/kg	90		58-112		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	98		73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	105		76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	109		78-111		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10354SLI026	Sample number(s): 6164941-6164942,6164945-6164957									
Acenaphthene	0.67	U	0.67	1.7	ug/kg	72		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	72		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	75		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	77		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	72		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	81		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	61		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	76		66-137		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	75		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	81*		84-132		
Chrysene	0.33	U	0.33	1.7	ug/kg	77*		79-120		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	61*		62-142		
Diethylphthalate	6.0	U	6.0	18	ug/kg	63*		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	77		70-130		
Bis(2-Ethylhexyl)phthalate	6.0	U	6.0	18	ug/kg	88		67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	76*		78-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	69*		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	61*		62-141		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	73		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	69		62-120		
Naphthalene	0.67	U	0.67	1.7	ug/kg	71		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	68		39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	72		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	76		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	88		56-121		
Batch number: 10361SLB026	Sample number(s): 6164941-6164942,6164945-6164946,6164957									
N-Nitrosodimethylamine	16.7	U	16.7	33.3	ng/kg	100		70-130		
Batch number: 10349A34B	Sample number(s): 6164941-6164942,6164945-6164946,6164957									
9a TPH by EPA 8015B Gas C5-C12	0.2	U	0.2	1.0	mg/kg	79	78	67-119	1	30
Batch number: 10350A94A	Sample number(s): 6164943-6164944									
TPH-GRO S.CA water C5-C12	20	U	20.	50	ug/l	91	100	75-135	10	30
Batch number: 103550019A	Sample number(s): 6164941-6164942,6164945-6164946,6164957									
4-Amino-2,6-Dinitrotoluene	75	U	75.	150	ug/kg	106		80-120		
2-Amino-4,6-Dinitrotoluene	50	U	50.	150	ug/kg	107		80-120		
2,6-Diamino-4-nitrotoluene	100 U		100.	300	ug/kg	90	89	54-134	2	30
2,4-Diamino-6-nitrotoluene	100 U		100.	300	ug/kg	90	88	54-134	2	30
1,3-Dinitrobenzene	50	U	50.	150	ug/kg	106		51-171		
2,4-Dinitrotoluene	50	U	50.	150	ug/kg	103		72-135		
2,6-Dinitrotoluene	50	U	50.	150	ug/kg	108		80-120		
HMX	130 U		130.	380	ug/kg	83		74-130		
Nitrobenzene	50	U	50.	150	ug/kg	102		80-120		
Nitroglycerin	1,000 U		1,000.	3,000	ug/kg	94		80-120		
2-Nitrotoluene	100 U		100.	150	ug/kg	108		78-128		
3-Nitrotoluene	130 U		130.	150	ug/kg	109		73-127		
4-Nitrotoluene	100 U		100.	150	ug/kg	107		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PETN	1,000 U		1,000.	3,000	ug/kg	106		80-120		
RDX	63	U	63.	150	ug/kg	106		75-131		
Tetryl	77	U	77.	150	ug/kg	135		70-168		
1,3,5-Trinitrobenzene	50	U	50.	150	ug/kg	121		77-137		
2,4,6-Trinitrotoluene	50	U	50.	150	ug/kg	109		80-120		
Batch number: 103510021A	Sample number(s): 6164941-6164942,6164945-6164946,6164957									
17a Formaldehyde by 8315A	600 U		600.	1,500	ug/kg	100		80-126		
Batch number: 103500036A	Sample number(s): 6164944									
2,4-D	0.16	U	0.16	0.50	ug/l	116	128	45-128	10	30
Dalapon	0.25	U	0.25	1.3	ug/l	81	89	40-100	9	30
2,4-DB	0.30	U	0.30	1.0	ug/l	100	112	41-138	11	30
Dicamba	0.080	U	0.080	0.30	ug/l	124	132	51-144	6	30
Dinoseb	0.10	U	0.10	0.50	ug/l	63	72	23-93	14	30
2,4-DP (Dichlorprop)	0.16	U	0.16	0.50	ug/l	120	136	72-145	13	30
MCPA	300 U		300.	1,000	ug/l	100	112	69-129	11	30
MCPP	50	U	50.	200	ug/l	112	124	66-132	10	30
2,4,5-T	0.015	U	0.015	0.050	ug/l	108	120	53-141	11	30
2,4,5-TP	0.010	U	0.010	0.050	ug/l	112	116	56-135	4	30
Batch number: 103570025A	Sample number(s): 6164948-6164956									
2,4-D	1.2	U	1.2	3.6	ug/kg	144*		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	78		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	97		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	98		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	8*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	119		60-141		
MCPA	76	U	76.	250	ug/kg	90		34-113		
MCPP (Mecoprop)	75	U	75.	250	ug/kg	107		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	96		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	98		48-138		
Batch number: 103500020A	Sample number(s): 6164948									
6a Perchlorate EPA 6850	2.1	U	2.1	5.0	ug/kg	99		85-115		
Batch number: 103500016A	Sample number(s): 6164944									
Aldrin	0.0020	U	0.0020	0.010	ug/l	96	101	54-159	5	30
Alpha BHC	0.0030	U	0.0030	0.010	ug/l	101	102	59-146	1	30
Beta BHC	0.0029	U	0.0029	0.010	ug/l	98	101	73-147	3	30
Gamma BHC - Lindane	0.0020	U	0.0020	0.010	ug/l	95	101	68-128	6	30
Chlordane	0.12	U	0.12	0.50	ug/l					
p,p-DDD	0.0050	U	0.0050	0.020	ug/l	100	110	71-139	10	30
p,p-DDE	0.0050	U	0.0050	0.020	ug/l	126	137*	66-130	8	30
p,p-DDT	0.0050	U	0.0050	0.020	ug/l	85	90	53-126	6	30
Delta BHC	0.0029	U	0.0029	0.010	ug/l	103	113	76-148	10	30
Dieldrin	0.0053	U	0.0053	0.020	ug/l	100	100	76-132	0	30
Endosulfan I	0.0043	U	0.0043	0.010	ug/l	78	83	68-128	6	30
Endosulfan II	0.015	U	0.015	0.020	ug/l	90	95	59-144	5	30
Endosulfan Sulfate	0.0058	U	0.0058	0.020	ug/l	95	100	71-142	5	30
Endrin	0.0081	U	0.0081	0.020	ug/l	85	85	52-132	0	30
Endrin Aldehyde	0.020	U	0.020	0.10	ug/l	105	110	68-139	5	20
Endrin Ketone	0.0050	U	0.0050	0.020	ug/l	90	105	69-146	15	30
Heptachlor	0.0026	U	0.0026	0.010	ug/l	93	102	57-126	9	30
Heptachlor Epoxide	0.0023	U	0.0023	0.010	ug/l	98	102	73-156	4	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methoxychlor	0.030	U	0.030	0.10	ug/l	91	97	52-133	6	30
Mirex	0.085	U	0.085	0.25	ug/l					
Toxaphene	1.0	U	1.0	3.0	ug/l					
Batch number: 103500017A	Sample number(s): 6164944									
Aroclor 5432	0.10	U	0.10	0.50	ug/l					
Aroclor 5442	0.10	U	0.10	0.50	ug/l	58*	56*	75-125	4	30
Aroclor 5460	0.10	U	0.10	0.50	ug/l					
PCB-1016	0.10	U	0.10	0.50	ug/l	102	100	68-119	2	30
PCB-1221	0.10	U	0.10	0.50	ug/l					
PCB-1232	0.20	U	0.20	0.50	ug/l					
PCB-1242	0.10	U	0.10	0.50	ug/l					
PCB-1248	0.10	U	0.10	0.50	ug/l					
PCB-1254	0.10	U	0.10	0.50	ug/l					
PCB-1260	0.10	U	0.10	0.50	ug/l	112	112	68-121	0	30
PCB-1262	0.20	U	0.20	0.50	ug/l					
PCB-1268	0.16	U	0.16	0.50	ug/l					
Batch number: 103510029A	Sample number(s): 6164948-6164956									
Aldrin	0.066	U	0.066	0.17	ug/kg	87		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	103		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	88		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	106		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	104		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	105		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	126		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	94		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	101		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	97		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	100		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	111		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	118		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	95		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	113		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	121		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	103		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	131*		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					
Batch number: 103540019A	Sample number(s): 6164941-6164942,6164945-6164957									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	58*	55*	75-125	4	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	98		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	116		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 103570006A	Sample number(s): 6164941-6164942,6164945-6164946,6164957									
EFH (C12-C14)	0.40	U	0.40	1.2	mg/kg	94		66-113		
EFH (C15-C20)	0.40	U	0.40	1.2	mg/kg	98		66-113		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
EFH (C21-C30)	0.40	U	0.40	1.2	mg/kg	100		66-113		
EFH (C30 - C40)	0.40	U	0.40	1.2	mg/kg	89		66-113		
EFH (C8-C11)	0.40	U	0.40	1.2	mg/kg	75		66-113		
Batch number: 103510010A	Sample number(s): 6164941-6164942,6164945-6164946,6164957									
Diethylene glycol	5.0	U	5.0	13	mg/kg	79		75-125		
Ethylene glycol	5.0	U	5.0	13	mg/kg	79		75-125		
Propylene glycol	5.0	U	5.0	13	mg/kg	72*		75-125		
Batch number: 103540002A	Sample number(s): 6164941-6164942,6164945-6164946,6164957									
Ethanol	100	U	100.	500	ug/kg	87		75-112		
Isopropanol	100	U	100.	500	ug/kg	90		75-125		
Methanol	100	U	100.	500	ug/kg	78		75-134		
Batch number: 103550027A	Sample number(s): 6164941-6164942,6164945-6164946,6164957									
m-Terphenyl	1.5	U	1.5	3.5	mg/kg	100	102	75-125	2	20
o-Terphenyl	1.5	U	1.5	3.5	mg/kg	104	106	75-125	2	20
p-Terphenyl	1.5	U	1.5	3.5	mg/kg	99	101	75-125	2	20
Batch number: 103511026004A	Sample number(s): 6164941-6164942,6164945-6164957									
Antimony	0.0600	U	0.0600	0.200	mg/kg	120		11-208		
Arsenic	0.0600	U	0.0600	0.400	mg/kg	101		80-120		
Beryllium	0.0160	U	0.0160	0.100	mg/kg	101		82-118		
Cadmium	0.0774	J	0.0360	0.100	mg/kg	114		82-118		
Chromium	0.120	U	0.120	0.400	mg/kg	103		80-120		
Cobalt	0.0200	U	0.0200	0.100	mg/kg	103		82-118		
Copper	0.0704	J	0.0660	0.400	mg/kg	98		80-120		
Lead	0.0185	J	0.0104	0.200	mg/kg	106		80-120		
Nickel	0.100	U	0.100	0.400	mg/kg	108		80-120		
Silver	0.0120	U	0.0120	0.100	mg/kg	101		66-134		
Thallium	0.0412	J	0.0300	0.100	mg/kg	112		81-119		
Vanadium	0.0507	J	0.0220	0.100	mg/kg	97		90-110		
Zinc	0.560	U	0.560	3.00	mg/kg	101		78-122		
Batch number: 103511026004B	Sample number(s): 6164941-6164942,6164945-6164957									
Selenium	0.0400	U	0.0400	0.400	mg/kg	95		79-122		
Batch number: 103511026004C	Sample number(s): 6164941-6164942,6164945-6164957									
Molybdenum	0.0500	U	0.0500	0.100	mg/kg	107		78-122		
Batch number: 103511026004D	Sample number(s): 6164941-6164942,6164945-6164957									
Barium	0.108	U	0.108	0.400	mg/kg	101		79-121		
Batch number: 103515708009	Sample number(s): 6164941-6164942,6164945-6164957									
Aluminum	5.03	U	5.03	20.0	mg/kg	100		61-110		
Boron	0.890	U	0.890	5.00	mg/kg	94		78-110		
Calcium	6.13	U	6.13	20.0	mg/kg	99		88-110		
Iron	4.71	U	4.71	20.0	mg/kg	109		61-110		
Lithium	0.22	U	0.22	2.0	mg/kg	103		80-120		
Magnesium	2.54	U	2.54	10.0	mg/kg	97		82-110		
Manganese	0.0780	U	0.0780	0.500	mg/kg	104		81-119		
Phosphorus	1.51	J	0.560	10.0	mg/kg	102		80-120		
Potassium	31.3	J	18.0	50.0	mg/kg	95		78-110		
Sodium	37.3	U	37.3	100	mg/kg	97		87-110		
Strontium	0.0620	U	0.0620	0.500	mg/kg	106		79-121		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Tin	1.41 J	1.00	10.0	mg/kg	103		90-114		
Titanium	0.380 U	0.380	1.00	mg/kg	107		80-120		
Zirconium	0.840 U	0.840	5.00	mg/kg	103		80-120		
Batch number: 103515711005	Sample number(s): 6164941-6164942,6164945-6164957								
Mercury	0.0028 U	0.0028	0.0961	mg/kg	96		88-123		
Batch number: 103545713001	Sample number(s): 6164944								
Mercury	0.000050 U	0.00005 0	0.00020	mg/l	97		80-120		
Batch number: 103551848003	Sample number(s): 6164944								
Aluminum	0.0834 U	0.0834	0.200	mg/l	96	92	90-112	4	20
Boron	0.0138 U	0.0138	0.0500	mg/l	97	94	90-110	3	20
Calcium	0.0960 J	0.0702	0.200	mg/l	102	99	90-112	3	20
Iron	0.0522 U	0.0522	0.200	mg/l	102	98	90-112	4	20
Lithium	0.0024 U	0.0024	0.0200	mg/l	100	98	80-120	2	20
Magnesium	0.0421 J	0.0172	0.100	mg/l	101	98	89-110	3	20
Manganese	0.00084 U	0.00084	0.0050	mg/l	103	101	90-110	3	20
Phosphorus	0.0089 U	0.0089	0.100	mg/l	104	102	80-120	2	20
Potassium	0.239 U	0.239	0.500	mg/l	100	99	85-115	2	20
Sodium	0.433 U	0.433	1.00	mg/l	100	100	87-114	0	20
Strontium	0.00089 U	0.00089	0.0050	mg/l	100	97	90-110	3	20
Tin	0.0098 U	0.0098	0.0200	mg/l	103	101	90-110	2	20
Titanium	0.0038 U	0.0038	0.0100	mg/l	105	102	90-113	3	20
Zirconium	0.0206 U	0.0206	0.0500	mg/l	101	99	80-120	3	20
Batch number: 103556050002A	Sample number(s): 6164944								
Antimony	0.00030 U	0.00030	0.0010	mg/l	105	110	87-110	5	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	99	106	86-111	7	20
Beryllium	0.00013 U	0.00013	0.00050	mg/l	108	103	90-112	5	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	105	110	90-114	5	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	98	102	90-118	4	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	101	104	80-120	3	20
Copper	0.00038 U	0.00038	0.0020	mg/l	104	104	90-113	0	20
Lead	0.000052 U	0.00005 2	0.0010	mg/l	105	107	90-115	2	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	107	109	90-113	2	20
Silver	0.000080 U	0.00008 0	0.00050	mg/l	107	108	90-115	2	20
Thallium	0.00015 U	0.00015	0.00050	mg/l	101	101	89-116	0	20
Vanadium	0.00016 U	0.00016	0.00050	mg/l	104	108	80-120	4	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	109	105	80-120	4	20
Batch number: 103556050002B	Sample number(s): 6164944								
Selenium	0.00025 U	0.00025	0.0020	mg/l	107	107	85-114	0	20
Batch number: 103556050002C	Sample number(s): 6164944								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	106	103	80-120	2	20
Batch number: 103556050002D	Sample number(s): 6164944								
Barium	0.00038 U	0.00038	0.0020	mg/l	107	106	88-113	1	20
Batch number: 10349113001A	Sample number(s): 6164944								
3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	99		90-110		
Batch number: 10350196902A	Sample number(s): 6164944								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	100	100	90-110	0	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10352658701A	Sample number(s): 6164944									
7b Perchlorate EPA 314.0	0.70	U	0.70	2.0	ug/l	90	91	85-115	1	20
Batch number: 10361102202A	Sample number(s): 6164941-6164942,6164945									
21a Cyanide by 9012B	0.13	U	0.13	0.50	mg/kg	105		80-120		
Batch number: 10361102202B	Sample number(s): 6164946,6164957									
21a Cyanide by 9012B	0.13	U	0.13	0.50	mg/kg	105		80-120		
Batch number: 11001243201A	Sample number(s): 6164941-6164942,6164945-6164957									
3a Cr VI by EPA 7199	0.20	U	0.20	1.0	mg/kg	97		80-120		
Batch number: 11005005201A	Sample number(s): 6164941-6164942,6164945-6164952									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	100		85-115		
Batch number: 11005005201B	Sample number(s): 6164953-6164957									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	100		85-115		
Batch number: 11007007201A	Sample number(s): 6164941-6164942,6164945-6164952									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	104		90-110		
11a Anions by 300.0 - Nitrate	0.80	U	0.80	1.5	mg/kg	104		90-110		
Batch number: 11007007201B	Sample number(s): 6164953-6164957									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	104		90-110		
11a Anions by 300.0 - Nitrate	0.80	U	0.80	1.5	mg/kg	104		90-110		
Batch number: 10350039402B	Sample number(s): 6164941-6164942,6164945-6164946									
22a pH by 9045C						100		95-105		
Batch number: 10350039403A	Sample number(s): 6164947-6164955									
22a pH by 9045C						101		95-105		
Batch number: 10350039403B	Sample number(s): 6164956-6164957									
22a pH by 9045C						101		95-105		
Batch number: 10350182102B	Sample number(s): 6164941-6164942,6164945-6164946									
Oxidation Reduction Potential						100		98-102		
Batch number: 10350182103A	Sample number(s): 6164947-6164955									
Oxidation Reduction Potential						100		98-102		
Batch number: 10350182103B	Sample number(s): 6164956-6164957									
Oxidation Reduction Potential						100		98-102		
Batch number: 10350162401A	Sample number(s): 6164948-6164956									
28a Moisture Content by 160.3						100		80-120		
Batch number: 10364162402A	Sample number(s): 6164942,6164945-6164947									
28a Moisture Content by 160.3						100		80-120		
Batch number: 10364162402B	Sample number(s): 6164941									
28a Moisture Content by 160.3						100		80-120		
Batch number: 11005162401A	Sample number(s): 6164957									
28a Moisture Content by 160.3						100		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B103501AA	Sample number(s): 6164941-6164942,6164945-6164947,6164957 UNSPK: 6164946								
Acetone	176		15-210						
Benzene	108		55-143						
Bromobenzene	92		43-139						
Bromochloromethane	98		60-137						
Bromodichloromethane	99		53-136						
Bromoform	87		38-124						
Bromomethane	80		42-168						
2-Butanone	125		37-163						
n-Butylbenzene	100		30-146						
sec-Butylbenzene	100		33-157						
tert-Butylbenzene	94		41-152						
Carbon Tetrachloride	108		45-153						
Chlorobenzene	99		49-135						
Chloroethane	86		39-152						
2-Chloroethyl Vinyl Ether	90		32-139						
Chloroform	106		61-142						
Chloromethane	101		51-163						
2-Chlorotoluene	97		42-146						
4-Chlorotoluene	97		39-145						
1,2-Dibromo-3-chloropropane	78		30-139						
Dibromochloromethane	94		51-128						
1,2-Dibromoethane	92		54-129						
Dibromomethane	97		57-130						
1,2-Dichlorobenzene	94		36-133						
1,3-Dichlorobenzene	92		34-134						
1,4-Dichlorobenzene	93		35-136						
Dichlorodifluoromethane	83		26-151						
1,1-Dichloroethane	108		63-142						
1,2-Dichloroethane	103		68-131						
1,1-Dichloroethene	114		61-149						
cis-1,2-Dichloroethene	105		60-136						
trans-1,2-Dichloroethene	109		59-142						
1,2-Dichloropropane	104		62-135						
1,3-Dichloropropane	97		58-129						
2,2-Dichloropropane	101		53-147						
1,1-Dichloropropene	108		54-145						
cis-1,3-Dichloropropene	91		51-131						
trans-1,3-Dichloropropene	88		49-129						
Ethylbenzene	101		44-141						
Freon 113	115		56-156						
Hexachlorobutadiene	88		10-155						
2-Hexanone	78		32-160						
Isopropylbenzene	100		38-144						
p-Isopropyltoluene	99		29-152						
Methyl Tertiary Butyl Ether	93		55-129						
4-Methyl-2-pentanone	68		46-139						
Methylene Chloride	101		61-141						
n-Propylbenzene	104		39-157						
Styrene	99		35-134						

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,1,1,2-Tetrachloroethane	99		52-130						
1,1,2,2-Tetrachloroethane	87		40-152						
Tetrachloroethene	101		42-149						
Toluene	104		50-146						
1,2,3-Trichlorobenzene	80		10-140						
1,2,4-Trichlorobenzene	81		10-136						
1,1,1-Trichloroethane	107		64-142						
1,1,2-Trichloroethane	95		54-139						
Trichloroethene	103		53-144						
Trichlorofluoromethane	94		47-163						
1,2,3-Trichloropropane	85		45-154						
1,2,4-Trimethylbenzene	98		37-149						
1,3,5-Trimethylbenzene	99		38-150						
Vinyl Chloride	91		50-154						
m+p-Xylene	102		44-137						
o-Xylene	96		42-137						
Batch number: E103502AA	Sample number(s): 6164943-6164944 UNSPK: P165404								
1,4-Dioxane	110	102	50-150	7	30				
Batch number: 10354SLF026	Sample number(s): 6164941-6164942,6164945-6164957 UNSPK: 6164941								
Aniline	50	54	14-114	8	30				
Benzidine	27*	40	35-141	37*	30				
Benzoic acid	52	49	10-173	6	30				
Benzyl alcohol	80	84	55-123	4	30				
4-Bromophenyl-phenylether	92	94	67-129	2	30				
Carbazole	102	104	64-120	3	30				
4-Chloro-3-methylphenol	89	88	53-130	1	30				
4-Chloroaniline	70	71	23-95	2	30				
bis(2-Chloroethoxy)methane	96	94	54-117	2	30				
bis(2-Chloroethyl)ether	86	90	60-116	5	30				
bis(2-Chloroisopropyl)ether	83	84	55-142	2	30				
2-Chloronaphthalene	84	84	50-141	1	30				
2-Chlorophenol	87	91	73-121	5	30				
4-Chlorophenyl-phenylether	93	95	64-119	2	30				
Dibenzofuran	96	98	71-112	2	30				
1,2-Dichlorobenzene	86	89	66-108	4	30				
1,3-Dichlorobenzene	85	88	63-109	4	30				
1,4-Dichlorobenzene	87	92	53-113	5	30				
3,3'-Dichlorobenzidine	65	68	25-123	6	30				
2,4-Dichlorophenol	94	95	78-117	1	30				
2,4-Dimethylphenol	89	92	56-130	4	30				
3,5-Dimethylphenol	101	100	70-130	2	30				
4,6-Dinitro-2-methylphenol	82	81	10-148	1	30				
2,4-Dinitrophenol	69	61	20-143	13	30				
2,4-Dinitrotoluene	100	98	57-114	2	30				
2,6-Dinitrotoluene	99	104	69-123	5	30				
1,2-Diphenylhydrazine	102	105	71-129	3	30				
bis(2-Ethylhexyl)phthalate	107	103	63-122	5	30				
Hexachlorobenzene	96	98	61-111	2	30				
Hexachlorobutadiene	99	99	62-120	0	30				
Hexachlorocyclopentadiene	97	108	10-153	11	30				
Hexachloroethane	89	94	57-109	6	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Isophorone	90	90	51-118	0	30				
2-Methylphenol	81	86	47-142	6	30				
4-Methylphenol	78	84	55-126	7	30				
2-Nitroaniline	106	103	67-125	3	30				
3-Nitroaniline	98	98	59-122	0	30				
4-Nitroaniline	73	77	52-112	5	30				
Nitrobenzene	99	99	51-114	0	30				
2-Nitrophenol	93	94	74-115	0	30				
4-Nitrophenol	102	101	39-133	1	30				
N-Nitroso-di-n-propylamine	78	82	60-116	4	30				
N-Nitrosodiphenylamine	94	99	86-145	5	30				
Pentachlorophenol	76	83	17-149	9	30				
Phenol	86	89	58-126	3	30				
1,2,4-Trichlorobenzene	95	94	72-115	1	30				
2,4,5-Trichlorophenol	97	99	34-139	2	30				
2,4,6-Trichlorophenol	99	98	49-140	1	30				
Batch number: 10354SLI026	Sample number(s): 6164941-6164942,6164945-6164957 UNSPK: 6164941								
Acenaphthene	75	77	63-105	3	30				
Acenaphthylene	78	80	55-126	2	30				
Anthracene	75	78	46-136	4	30				
Benzo(a)anthracene	78	80	39-144	3	30				
Benzo(a)pyrene	72	77	34-156	8	30				
Benzo(b)fluoranthene	84	85	43-155	2	30				
Benzo(g,h,i)perylene	75	79	33-141	5	30				
Benzo(k)fluoranthene	70	74	42-144	5	30				
Butylbenzylphthalate	84	90	73-140	7	30				
Di-n-butylphthalate	84	87	78-160	3	30				
Chrysene	74	77	29-156	4	30				
Dibenz(a,h)anthracene	74	80	41-130	7	30				
Diethylphthalate	70*	72*	87-131	3	30				
Dimethylphthalate	81	85	74-118	4	30				
Bis(2-Ethylhexyl)phthalate	120	95	39-167	24	30				
Fluoranthene	77	80	26-166	4	30				
Fluorene	79	81	45-121	3	30				
Indeno(1,2,3-cd)pyrene	74	79	21-143	5	30				
1-Methylnaphthalene	76	78	72-123	3	30				
2-Methylnaphthalene	70	71	28-121	2	30				
Naphthalene	73	75	61-102	2	30				
N-Nitrosodimethylamine	84	83	48-113	0	30				
Di-n-octylphthalate	80	82	40-192	2	30				
Phenanthrene	75	77	12-165	3	30				
Pyrene	73	77	15-153	5	30				
Batch number: 10361SLB026	Sample number(s): 6164941-6164942,6164945-6164946,6164957 UNSPK: 6164941								
N-Nitrosodimethylamine	94	88	70-130	5	30				
Batch number: 10349A34B	Sample number(s): 6164941-6164942,6164945-6164946,6164957 UNSPK: P163871								
9a TPH by EPA 8015B Gas C5-C12	65	66	39-118	0	30				
Batch number: 103550019A	Sample number(s): 6164941-6164942,6164945-6164946,6164957 UNSPK: P163871								
4-Amino-2,6-Dinitrotoluene	106	107	80-127	1	50				
2-Amino-4,6-Dinitrotoluene	105	105	80-137	0	50				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,3-Dinitrobenzene	103	103	38-166	1	50				
2,4-Dinitrotoluene	100	101	80-131	0	50				
2,6-Dinitrotoluene	107	107	80-127	0	50				
HMX	81	83	63-128	2	50				
Nitrobenzene	100	100	80-125	0	50				
Nitroglycerin	94	93	80-120	0	50				
2-Nitrotoluene	106	105	80-122	1	50				
3-Nitrotoluene	107	106	72-119	1	50				
4-Nitrotoluene	106	106	80-125	0	50				
PETN	108	107	80-121	0	50				
RDX	97	99	75-129	2	50				
Tetryl	131	135	55-174	3	50				
1,3,5-Trinitrobenzene	118	119	82-126	0	50				
2,4,6-Trinitrotoluene	106	107	82-130	1	50				
Batch number: 103510021A	Sample number(s): 6164941-6164942,6164945-6164946,6164957 UNSPK: P163871								
17a Formaldehyde by 8315A	97	99	80-120	2	50				
Batch number: 103570025A	Sample number(s): 6164948-6164956 UNSPK: P166190								
2,4-D	104	75	28-161	32	35				
Dalapon	87*	82	12-86	6	50				
2,4-DB	184*	119	20-170	43	50				
Dicamba	178*	129*	33-120	32	50				
Dinoseb	15	11	1-44	27	35				
2,4-DP (Dichlorprop)	75	107	55-141	35	50				
MCPA	298*	96	31-184	103*	50				
MCPP (Mecoprop)	126	102	16-174	21	50				
2,4,5-T	71	61	25-132	15	35				
2,4,5-TP	116	83	10-183	33	35				
Batch number: 103500020A	Sample number(s): 6164948 UNSPK: 6164948								
6a Perchlorate EPA 6850	100	100	80-120	0	20				
Batch number: 103510029A	Sample number(s): 6164948-6164956 UNSPK: P162943								
Aldrin	77	87	16-126	12	50				
Alpha BHC	100	109	10-129	9	50				
Beta BHC	88	97	14-147	10	50				
Gamma BHC - Lindane	100	109	10-140	9	50				
p,p-DDD	80	88	16-163	10	50				
p,p-DDE	90	102	18-161	12	50				
p,p-DDT	103	116	10-176	12	50				
Delta BHC	94	106	23-140	13	50				
Dieldrin	76	84	19-154	10	50				
Endosulfan I	76	82	16-137	8	50				
Endosulfan II	70	76	28-154	9	50				
Endosulfan Sulfate	86	94	21-160	9	50				
Endrin	88	99	11-149	11	50				
Endrin Aldehyde	77	87	10-148	12	35				
Endrin Ketone	82	85	22-165	4	50				
Heptachlor	118	136*	13-126	14	50				
Heptachlor Epoxide	81	90	13-157	11	50				
Methoxychlor	102	114	32-147	11	50				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 103540019A	Sample number(s): 6164941-6164942,6164945-6164957 UNSPK: P162864								
PCB-1016	101	104	29-146	3	50				
PCB-1260	105	111	39-149	5	50				
Batch number: 103570006A	Sample number(s): 6164941-6164942,6164945-6164946,6164957 UNSPK: P162942								
EFH (C12-C14)	88	86	49-123	3	20				
EFH (C15-C20)	172*	137*	49-123	23*	20				
EFH (C21-C30)	799*	504*	49-123	29*	20				
EFH (C30 - C40)	1486 (2)	1361 (2)	49-123	6	20				
EFH (C8-C11)	61	62	49-123	2	20				
Batch number: 103510010A	Sample number(s): 6164941-6164942,6164945-6164946,6164957 UNSPK: 6164941								
Diethylene glycol	60	85	59-109	36*	20				
Ethylene glycol	85	88	63-107	3	20				
Propylene glycol	72	73	63-107	1	20				
Batch number: 103540002A	Sample number(s): 6164941-6164942,6164945-6164946,6164957 UNSPK: P163871								
Ethanol	82	84	24-143	3	20				
Isopropanol	84	85	75-125	1	20				
Methanol	75	86	45-136	14	20				
Batch number: 103511026004A	Sample number(s): 6164941-6164942,6164945-6164957 UNSPK: 6164941 BKG: 6164941								
Antimony	100	84	75-125	12	20	0.150 J	0.133 J	12 (1)	20
Arsenic	292*	228*	75-125	11	20	5.25	7.00	29*	20
Beryllium	197*	149*	75-125	18	20	0.498	0.548	9	20
Cadmium	169*	171*	75-125	3	20	0.0836 J	0.0985	16 (1)	20
Chromium	211*	194*	75-125	3	20	13.2	17.5	28*	20
Cobalt	149*	143*	75-125	1	20	5.28	6.39	19	20
Copper	159*	157*	75-125	1	20	5.42	7.10	27*	20
Lead	257*	229*	75-125	5	20	4.41	5.87	28*	20
Nickel	172*	164*	75-125	1	20	7.94	10.3	26*	20
Silver	173*	163*	75-125	3	20	0.0139 J	0.0186 J	30* (1)	20
Thallium	224*	203*	75-125	5	20	0.333	0.408	20 (1)	20
Vanadium	264*	249*	75-125	1	20	27.7	36.5	27*	20
Zinc	365 (2)	304 (2)	75-125	6	20	55.7	75.6	30*	20
Batch number: 103511026004B	Sample number(s): 6164941-6164942,6164945-6164957 UNSPK: 6164941 BKG: 6164941								
Selenium	93	88	75-125	2	20	0.0948 J	0.120 J	24* (1)	20
Batch number: 103511026004C	Sample number(s): 6164941-6164942,6164945-6164957 UNSPK: 6164941 BKG: 6164941								
Molybdenum	175*	165*	75-125	3	20	0.441	0.608	32* (1)	20
Batch number: 103511026004D	Sample number(s): 6164941-6164942,6164945-6164957 UNSPK: 6164941 BKG: 6164941								
Barium	472 (2)	400 (2)	75-125	6	20	59.7	83.3	33*	20
Batch number: 103515708009	Sample number(s): 6164941-6164942,6164945-6164957 UNSPK: 6164941 BKG: 6164941								
Aluminum	1340 (2)	771 (2)	75-125	8	20	11,700	11,000	6	20
Boron	97	97	84-115	0	20	2.79 J	1.89 J	39* (1)	20
Calcium	190 (2)	116 (2)	75-125	8	20	3,000	3,200	6	20
Iron	670 (2)	-620 (2)	75-125	7	20	18,600	18,000	3	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Lithium	104	106	82-114	2	20	21.4		20.7		3	20
Magnesium	358 (2)	250 (2)	75-125	5	20	3,720		3,800		2	20
Manganese	89 (2)	55 (2)	75-125	5	20	295		261		12	20
Phosphorus	95	66*	75-125	7	20	310		298		4	20
Potassium	139*	121	75-125	5	20	2,360		2,300		3	20
Sodium	103	104	75-125	1	20	89.4	J	89.1	J	0 (1)	20
Strontium	100	99	75-115	1	20	11.5		12.0		4	20
Tin	95	94	80-110	1	20	2.59	J	2.31	J	12 (1)	20
Titanium	221 (2)	131 (2)	75-125	7	20	1,140		1,070		7	20
Zirconium	102	105	75-125	3	20	0.832	U	1.01	J	200* (1)	20
Batch number: 103515711005	Sample number(s): 6164941-6164942,6164945-6164957 UNSPK: 6164941 BKG: 6164941										
Mercury	98	99	65-135	2	20	0.0029	U	0.0028	U	0 (1)	20
Batch number: 10349113001A	Sample number(s): 6164944 UNSPK: P164525 BKG: P164525										
3b Cr VI by EPA 7199	100		59-135			5.0	U	5.0	U	0 (1)	20
Batch number: 10361102202A	Sample number(s): 6164941-6164942,6164945 UNSPK: P163885 BKG: P163885										
21a Cyanide by 9012B	100		75-125			0.18	U	0.18	U	0 (1)	20
Batch number: 10361102202B	Sample number(s): 6164946,6164957 UNSPK: 6164946 BKG: 6164946										
21a Cyanide by 9012B	102		75-125			0.17	U	0.18	U	0 (1)	20
Batch number: 11001243201A	Sample number(s): 6164941-6164942,6164945-6164957 UNSPK: 6164941 BKG: 6164941										
3a Cr VI by EPA 7199	97		75-125			0.30	J	0.41	J	30* (1)	20
Batch number: 11005005201A	Sample number(s): 6164941-6164942,6164945-6164952 UNSPK: 6164941 BKG: 6164941										
7a Perchlorate EPA 314.0	105		80-120			9.0	U	9.0	U	0 (1)	15
Batch number: 11005005201B	Sample number(s): 6164953-6164957 UNSPK: 6164953 BKG: 6164953										
7a Perchlorate EPA 314.0	116		80-120			9.0	U	9.0	U	0 (1)	15
Batch number: 11007007201A	Sample number(s): 6164941-6164942,6164945-6164952 UNSPK: 6164941 BKG: 6164941										
11a Anions by 300.0 - Fluoride	118		80-120			0.80	U	1.2		200* (1)	20
11a Anions by 300.0 - Nitrate	114		80-120			1.7		1.7		0 (1)	20
Batch number: 11007007201B	Sample number(s): 6164953-6164957 UNSPK: 6164953 BKG: 6164953										
11a Anions by 300.0 - Fluoride	65*		80-120			1.1		0.89	J	24* (1)	20
11a Anions by 300.0 - Nitrate	92		80-120			1.4	J	0.80	U	200* (1)	20
Batch number: 10350039402B	Sample number(s): 6164941-6164942,6164945-6164946 BKG: 6164946										
22a pH by 9045C						8.25		8.21		0	1
Batch number: 10350039403A	Sample number(s): 6164947-6164955 BKG: 6164947										
22a pH by 9045C						7.08		7.11		0	1
Batch number: 10350039403B	Sample number(s): 6164956-6164957 BKG: 6164957										
22a pH by 9045C						7.41		7.43		0	1
Batch number: 10350182102B	Sample number(s): 6164941-6164942,6164945-6164946 BKG: 6164946										
Oxidation Reduction Potential						426		428		1	6
Batch number: 10350182103A	Sample number(s): 6164947-6164955 BKG: 6164947										

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Oxidation Reduction Potential						381	381	0	6
Batch number: 10350182103B	Sample number(s): 6164956-6164957 BKG: 6164957								
Oxidation Reduction Potential						423	420	1	6
Batch number: 10350162401A	Sample number(s): 6164948-6164956 BKG: P154843								
28a Moisture Content by 160.3						12.4	13.1	6	20
Batch number: 10364162402A	Sample number(s): 6164942,6164945-6164947 BKG: P167525								
28a Moisture Content by 160.3						11.9	12.1	1	20
Batch number: 10364162402B	Sample number(s): 6164941 BKG: P163871								
28a Moisture Content by 160.3						11.4	11.7	3	20
Batch number: 11005162401A	Sample number(s): 6164957 BKG: P168986								
28a Moisture Content by 160.3						10.0	9.9	1	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 1a Volatile Organics EPA 8260B
Batch number: B103501AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6164941	103	99	97	92
6164942	105	102	98	90
6164945	105	101	98	91
6164946	104	99	98	91
6164947	104	100	97	93
6164957	104	99	97	92
Blank	104	101	97	93
LCS	100	103	99	100
LCSD	99	102	100	100
MS	100	97	102	101
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 14b 1,4-Dioxane by 8260B SIM
Batch number: E103502AA

	Toluene-d8
6164943	101
6164944	101
Blank	99
LCS	100
MS	101
MSD	100

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Surrogate Quality Control

Limits: 80-120

Analysis Name: 14a 1,4-Dioxane by 8260B SIM
Batch number: E103511AA

	Toluene-d8
6164941	98
6164942	99
6164945	98
6164946	99
6164947	75
6164957	99
Blank	100
LCS	99
LCSD	100
Limits:	70-130

Analysis Name: 1b Volatile Organics EPA8260
Batch number: Y103512AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6164944	100	97	102	100
Blank	100	98	101	99
LCS	100	101	104	103
LCSD	97	97	103	102
Limits:	86-118	80-120	88-110	86-115

Analysis Name: 5b Semivolatiles by EPA 8270C
Batch number: 10350WAB026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6164944	46	31	81	79	79	78
Blank	53	36	81	84	81	83
LCS	59	40	86	85	86	83
LCSD	71	48	103	102	105	99
Limits:	20-130	20-120	30-130	40-130	45-130	45-135

Analysis Name: 4b Select SVOC EPA 8270SIM
Batch number: 10350WAH026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6164944	96	70	75
Blank	78	71	76
LCS	80	72	71
LCSD	69	70	72
Limits:	40-130	45-130	45-135

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 10354SLF026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6164941	84	85	92	82	92	85
6164942	81	83	92	79	89	81

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Surrogate Quality Control

6164945	80	82	89	79	91	83
6164946	82	85	90	80	93	84
6164947	82	85	90	78	92	85
6164948	90	89	101	85	96	86
6164949	89	90	98	83	95	86
6164950	89	91	101	83	94	92
6164951	80	80	96	80	92	83
6164952	84	86	101	81	94	87
6164953	85	83	89	76	86	94
6164954	97	96	97	84	98	99
6164955	94	92	104	82	90	97
6164956	97	94	103	82	93	105
6164957	92	89	103	79	89	96
Blank	91	93	97	82	96	86
LCS	88	87	107	93	95	88
MS	82	84	98	90	92	84
MSD	85	88	99	90	94	85
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10354SLI026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6164941	69	64	75
6164942	73	67	79
6164945	76	72	79
6164946	63	68	76
6164947	75	73	77
6164948	79	70	74
6164949	81	80	77
6164950	84	75	68
6164951	75	70	91
6164952	75	71	74
6164953	75	71	72
6164954	75	69	70
6164955	81	73	72
6164956	80	71	71
6164957	78	71	75
Blank	76	72	78
LCS	74	67	88
MS	80	76	78
MSD	79	73	77
Limits:	40-130	45-130	45-135

Analysis Name: 19a NDMA by 1625C
Batch number: 10361SLB026

	N-Nitrosodimethylamine-d6
6164941	101
6164942	107
6164945	141
6164946	109
6164957	103
Blank	106

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Surrogate Quality Control

LCS	108
MS	101
MSD	113
Limits:	50-150

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 10349A34B

	Trifluorotoluene-F
6164941	91
6164942	83
6164945	88
6164946	92
6164957	80
Blank	96
LCS	102
LCSD	99
MS	80
MSD	79
Limits:	61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12
Batch number: 10350A94A

	Trifluorotoluene-F
6164943	85
6164944	89
Blank	85
LCS	96
LCSD	99
Limits:	63-135

Analysis Name: 12b Pesticides by 8081A
Batch number: 103500016A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6164944	101	84
Blank	103	97
LCS	99	86
LCSD	104	91
Limits:	52-141	40-144

Analysis Name: 8b PCBs/PCTs by 8082
Batch number: 103500017A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6164944	119	120
Blank	123	119
LCS	117	114
LCSD	120	116
Limits:	30-150	45-120

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Surrogate Quality Control

Analysis Name: 13b Herbicides by EPA 8151
Batch number: 103500036A

	2,4-Dichlorophenylacetic acid
6164944	85
Blank	90
LCS	107
LCSD	112
Limits:	35-144

Analysis Name: 17a Formaldehyde by 8315A
Batch number: 103510021A

	Butyraldehyde
6164941	99
6164942	109
6164945	110
6164946	97
6164957	99
Blank	100
LCS	105
MS	105
MSD	104
Limits:	64-126

Analysis Name: 12a Pesticides by 8081A
Batch number: 103510029A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6164948	89	19*
6164949	79	34
6164950	79	0*
6164951	89	56
6164952	70	69
6164953	75	46
6164954	79	59
6164955	73	68
6164956	86	112
Blank	85	105
LCS	81	107
MS	81	80
MSD	89	79
Limits:	50-130	20-120

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 103540019A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6164941	111	121*
6164942	98	120
6164945	101	118
6164946	69	91
6164947	97	120

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Surrogate Quality Control

6164948	118	142*
6164949	116	132*
6164950	50*	84
6164951	120	127*
6164952	128	151*
6164953	88	129*
6164954	81	118
6164955	122	155*
6164956	195*	185*
6164957	135	151*
Blank	99	105
LCS	110	115
LCSD	102	106
MS	114	104
MSD	116	107
Limits:	53-139	45-120

Analysis Name: 20a Energetics by 8330A
Batch number: 103550019A

	2-Nitro-m-xylene
6164941	108
6164942	110
6164945	106
6164946	105
6164957	102
Blank	112
LCS	105
LCSD	102
MS	108
MSD	105
Limits:	80-146

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 103570025A

	2,4-Dichlorophenylacetic acid
6164948	128
6164949	107
6164950	231*
6164951	178*
6164952	157*
6164953	193*
6164954	162*
6164955	100
6164956	377*
Blank	85
LCS	97
MS	130
MSD	127
Limits:	36-156

Analysis Name: 27a Glycols by 8015B

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Surrogate Quality Control

Batch number: 103510010A

	Tetramethylene glycol
6164941	70
6164942	79
6164945	70
6164946	81
6164957	88
Blank	95
LCS	92
MS	117
MSD	98
Limits:	50-119

Analysis Name: 25a Alcohols by 8015B
Batch number: 103540002A

	Acetone
6164941	94
6164942	85
6164945	84
6164946	87
6164957	91
Blank	93
LCS	90
MS	82
MSD	85
Limits:	42-138

Analysis Name: 26a Terphenyls by 8015B
Batch number: 103550027A

	n-Triacontane-d62
6164941	97
6164942	94
6164945	90
6164946	93
6164957	97
Blank	99
LCS	96
LCSD	97
Limits:	50-150

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 103570006A

	Chlorobenzene	Orthoterphenyl
6164941	79	88
6164942	78	85
6164945	70	82
6164946	70	82
6164957	73	86
Blank	87	94
LCS	85	94

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225546
Reported: 01/19/11 at 11:07 AM

Surrogate Quality Control

MS	91	96
MSD	89	97
Limits:	37-125	47-145

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

13013 1225546 6164941-57

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-EPH EPA 8015B Mod.	*Metals EPA 6010/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Perchlorate EPA 8321B	Other Instructions and Notes
SL-002-SA5C-SB-4.0-5.0	12.14.10	0942	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-002-SA5C-SB-9.0-10.0	12.14.10	0950	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
TB-121410	12.14.10	0800	water	HCl	2-40 mL VOA vials	X	X		X																				trip blank
EB02-SA5B-121410	12.14.10	1230	water	none	6-1 liter ambers			X						X	X			X	X										rinsate
EB02-SA5B-121410	12.14.10	1230	water	none	1-500 ml poly							X	X			X													rinsate
EB02-SA5B-121410	12.14.10	1230	water	HNO3	1-500 ml poly						X																		rinsate
EB02-SA5B-121410	12.14.10	1230	water	HCl	6-40 mL amber VOA vials	X	X		X																				rinsate
SL-002-SA5C-SB-9.5	12.14.10	0948	soil	none	5 Encore Samplers	X	X		X																				
SL-002-SA5C-SB-4.5	12.14.10	0938	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-4.5	12.14.10	1104	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-9.5	12.14.10	1115	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-9.0-10.0	12.14.10	1118	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-004-SA5C-SB-4.0-5.0	12.14.10	1111	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-140-SA5C-SB-3.0-4.0	12.14.10	1428	soil	none	2 x 16 oz. jars			X			X	X	X	X	X	X													
SL-140-SA5C-SB-3.5	12.14.10	1425	soil	none	5 Encore Samplers	X	X																						
DUP05-SA5B-QC-121410	12.14.10	0850	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										DUP
SL-120-SA5B-SS-0.0-0.5MS	12.14.10	0847	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X										MS/MSD
SL-108-SA5B-SS-0.0-0.5	12.14.10	0855	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-119-SA5B-SS-0.0-0.5	12.14.10	0830	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-240-SA5B-SS-0.0-0.5	12.14.10	0933	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-109-SA5B-SS-0.0-0.5	12.14.10	0909	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-122-SA5B-SS-0.0-0.5	12.14.10	0940	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-121-SA5B-SS-0.0-0.5	12.14.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-054-SA5B-SS-0.0-0.5	12.14.10	0921	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-105-SA5B-SS-0.0-0.5	12.14.10	0835	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-098-SA5B-SS-0.0-0.5	12.14.10	1043	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-142-SA5B-SS-0.0-0.5	12.14.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-143-SA5B-SS-0.0-0.5	12.14.10	1115	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-123-SA5B-SS-0.0-0.5	12.14.10	1040	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-124-SA5B-SS-0.0-0.5	12.14.10	1100	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-309-SA5B-SS-0.0-0.5	12.14.10	1325	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-311-SA5B-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-310-SA5B-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-312-SA5B-SS-0.0-0.5	12.14.10	1427	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-025-SIV-SD-0.0-0.5	12.14.10	1244	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-024-SIV-SD-0.0-0.5	12.14.10	1116	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-023-SIV-SD-0.0-0.5	12.14.10	0919	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-022-SIV-SD-0.0-0.5	12.14.10	1008	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-125-SA5B-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-126-SA5B-SS-0.0-0.5	12.14.10	1420	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-129-SA5B-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-128-SA5B-SS-0.0-0.5	12.14.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-027-SIV-SD-0.0-0.5	12.14.10	1559	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-026-SIV-SD-0.0-0.5	12.14.10	1522	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-060-SA5C-SB-10.0-11.0	12.14.10	1618	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-060-SA5C-SB-10.5	12.14.10	1614	soil	none	5 Encore Samplers	X	X		X																				

Relinquished by: *(Signature)*	Date/Time	Received for Laboratory by: *(Signature)*	Date/Time		Other Instructions and Notes
	12.14.10 1700		12/15/10	946	Laboratory: Lancaster Laboratories, Inc.
Received by: *(Signature)*	Date/Time	Airbill No.			
		00732992			No. of coolers = 5
		Tracking Number 869514317156			

TO: Nicole Maljovec

FROM: Ann Marie Crites

DATE: 12/15/10

RE: Missing Encore samples

Nicole,

Be advised that two Encore samples, SL-004-SA5C-SB-4.5 and SL-004-SA5C-SB-9.5, were inadvertently missed in the shipment of 12/14/10. These samples are included in today's shipment, under COC.

If you have an questions regarding these samples or this shipment, feel free to contact me.

Sincerely,
Ann Marie Crites, Sample Manager
CDM
Santa Susana Field Laboratory
406-422-8139



CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-EFH EPA 8015B Mod.	*Metals EPA 6010B/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-002-SA5C-SB-4.0-5.0	12.14.10	0942	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-002-SA5C-SB-9.0-10.0	12.14.10	0950	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
TB-121410	12.14.10	0800	water	HCl	2-40 mL VOA vials	X	X		X																				trip blank
EB02-SA5B-121410	12.14.10	1230	water	none	6-1 liter ambers			X						X	X			X	X										rinsate
EB02-SA5B-121410	12.14.10	1230	water	none	1-500 ml poly							X	X			X													rinsate
EB02-SA5B-121410	12.14.10	1230	water	HNO3	1-500 ml poly						X																		rinsate
EB02-SA5B-121410	12.14.10	1230	water	HCl	6-40 mL amber VOA vials	X	X		X																				rinsate
SL-002-SA5C-SB-9.5	12.14.10	0948	soil	none	5 Encore Samplers	X	X		X																				
SL-002-SA5C-SB-4.5	12.14.10	0938	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-4.5	12.14.10	1104	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-9.5	12.14.10	1115	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-9.0-10.0	12.14.10	1118	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-004-SA5C-SB-4.0-5.0	12.14.10	1111	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-140-SA5C-SB-3.0-4.0	12.14.10	1428	soil	none	2 x 16 oz. jars			X			X	X	X	X	X	X													
SL-140-SA5C-SB-3.5	12.14.10	1425	soil	none	5 Encore Samplers	X	X																						
DUP05-SA5B-QC-121410	12.14.10	0850	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										DUP
SL-120-SA5B-SS-0.0-0.5MS	12.14.10	0847	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X										MS/MSD
SL-108-SA5B-SS-0.0-0.5	12.14.10	0855	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-119-SA5B-SS-0.0-0.5	12.14.10	0830	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-240-SA5B-SS-0.0-0.5	12.14.10	0933	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-109-SA5B-SS-0.0-0.5	12.14.10	0909	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-122-SA5B-SS-0.0-0.5	12.14.10	0940	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-121-SA5B-SS-0.0-0.5	12.14.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-054-SA5B-SS-0.0-0.5	12.14.10	0921	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-105-SA5B-SS-0.0-0.5	12.14.10	0835	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-098-SA5B-SS-0.0-0.5	12.14.10	1043	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-142-SA5B-SS-0.0-0.5	12.14.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-143-SA5B-SS-0.0-0.5	12.14.10	1115	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-123-SA5B-SS-0.0-0.5	12.14.10	1040	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-124-SA5B-SS-0.0-0.5	12.14.10	1100	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-309-SA5B-SS-0.0-0.5	12.14.10	1325	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-311-SA5B-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-310-SA5B-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-312-SA5B-SS-0.0-0.5	12.14.10	1427	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-025-SIV-SD-0.0-0.5	12.14.10	1244	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-024-SIV-SD-0.0-0.5	12.14.10	1116	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-023-SIV-SD-0.0-0.5	12.14.10	0919	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-022-SIV-SD-0.0-0.5	12.14.10	1008	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-125-SA5B-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-126-SA5B-SS-0.0-0.5	12.14.10	1420	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-129-SA5B-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-128-SA5B-SS-0.0-0.5	12.14.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-027-SIV-SD-0.0-0.5	12.14.10	1559	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-026-SIV-SD-0.0-0.5	12.14.10	1522	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-060-SA5C-SB-10.0-11.0	12.14.10	1618	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-060-SA5C-SB-10.5	12.14.10	1614	soil	none	5 Encore Samplers	X	X		X																				

Relinquished by: *(Signature)*	Date/Time	Received for Laboratory by: *(Signature)*	Date/Time	Laboratory:
	12.14.10 1700		12/14/10 1600	Lancaster Laboratories, Inc.
Received by: *(Signature)*	**Date/Time**	**Airbill No.**		
		00732992 Tracking Number 869514317156		No. of coolers = 5

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 02, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/15/2010
Group Number: 1225550
SDG: DX023
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-002-SA5C-SB-4.0-5.0 Soil	6164970
SL-002-SA5C-SB-9.0-10.0 Soil	6164971
EB02-SA5B-121410 Water	6164972
SL-004-SA5C-SB-9.0-10.0 Soil	6164973
SL-004-SA5C-SB-4.0-5.0 Soil	6164974
SL-140-SA5C-SB-3.0-4.0 Soil	6164975
SED-024-SIV-SD-0.0-0.5 Sediment	6164976
SED-023-SIV-SD-0.0-0.5 Sediment	6164977
SED-022-SIV-SD-0.0-0.5 Sediment	6164978
SL-125-SA5B-SS-0.0-0.5 Soil	6164979
SL-126-SA5B-SS-0.0-0.5 Soil	6164980
SL-129-SA5B-SS-0.0-0.5 Soil	6164981
SL-128-SA5B-SS-0.0-0.5 Soil	6164982
SED-027-SIV-SD-0.0-0.5 Sediment	6164983
SED-026-SIV-SD-0.0-0.5 Sediment	6164984
SL-060-SA5C-SB-10.0-11.0 Soil	6164985

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	CDM Federal Services Program	Attn: Todd Burgesser
1 COPY TO	Data Package Group	

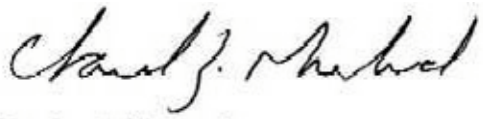
Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Charles J. Neslund
Manager

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164970
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2301 SDG#: DX023-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164970
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2301 SDG#: DX023-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0226 JBQ	0.0184	1.07	1
11031	12378-PeCDD	40321-76-4	0.0805 JBQ	0.0271	5.33	1
11031	123478-HxCDD	39227-28-6	0.0232 U	0.0232	5.33	1
11031	123678-HxCDD	57653-85-7	0.124 JB	0.0242	5.33	1
11031	123789-HxCDD	19408-74-3	0.141 JB	0.0244	5.33	1
11031	1234678-HpCDD	35822-46-9	0.233 JBQ	0.0322	5.33	1
11031	OCDD	3268-87-9	0.786 JB	0.0433	10.7	1
11031	2378-TCDF	51207-31-9	0.0199 JBQ	0.0167	1.07	1
11031	12378-PeCDF	57117-41-6	0.0462 JBQ	0.0107	5.33	1
11031	23478-PeCDF	57117-31-4	0.0561 JB	0.0106	5.33	1
11031	123478-HxCDF	70648-26-9	0.0426 JB	0.0155	5.33	1
11031	123678-HxCDF	57117-44-9	0.0577 JBQ	0.0143	5.33	1
11031	123789-HxCDF	72918-21-9	0.0878 JBQ	0.0186	5.33	1
11031	234678-HxCDF	60851-34-5	0.0787 JB	0.0148	5.33	1
11031	1234678-HpCDF	67562-39-4	0.172 JB	0.0154	5.33	1
11031	1234789-HpCDF	55673-89-7	0.0860 JBQ	0.0220	5.33	1
11031	OCDF	39001-02-0	0.207 JB	0.0350	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*

*=This limit was used in the evaluation of the final result

Sample Description: **SL-002-SA5C-SB-4.0-5.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164970
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2301 SDG#: DX023-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-002-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-4.0-5.0

LLI Sample # SW 6164970
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:42

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2301 SDG#: DX023-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 17:06	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402B	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164971
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2302 SDG#: DX023-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	16.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164971
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2302 SDG#: DX023-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0168 U	0.0168	1.20	1
11031	12378-PeCDD	40321-76-4	0.0240 U	0.0240	6.00	1
11031	123478-HxCDD	39227-28-6	0.0267 JBQ	0.0196	6.00	1
11031	123678-HxCDD	57653-85-7	0.0815 JB	0.0198	6.00	1
11031	123789-HxCDD	19408-74-3	0.139 JB	0.0190	6.00	1
11031	1234678-HpCDD	35822-46-9	0.277 JBQ	0.0257	6.00	1
11031	OCDD	3268-87-9	1.30 JB	0.0373	12.0	1
11031	2378-TCDF	51207-31-9	0.0192 JBQ	0.0154	1.20	1
11031	12378-PeCDF	57117-41-6	0.0438 JBQ	0.00852	6.00	1
11031	23478-PeCDF	57117-31-4	0.0560 JB	0.00912	6.00	1
11031	123478-HxCDF	70648-26-9	0.0487 JB	0.0150	6.00	1
11031	123678-HxCDF	57117-44-9	0.0378 JB	0.0122	6.00	1
11031	123789-HxCDF	72918-21-9	0.160 JB	0.0168	6.00	1
11031	234678-HxCDF	60851-34-5	0.0442 JB	0.0139	6.00	1
11031	1234678-HpCDF	67562-39-4	0.119 JB	0.00996	6.00	1
11031	1234789-HpCDF	55673-89-7	0.0608 JB	0.0174	6.00	1
11031	OCDF	39001-02-0	0.169 JBQ	0.0365	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164971
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2302 SDG#: DX023-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-002-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-002-SA5C-SB-9.0-10.0

LLI Sample # SW 6164971
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:50

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2302 SDG#: DX023-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 18:03	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB02-SA5B-121410 Water
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164972
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2303 SDG#: DX023-03EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.919	U	0.919	1.96	1
10915	12378-PeCDD	40321-76-4	0.535	U	0.535	9.82	1
10915	123478-HxCDD	39227-28-6	0.317	JBQ	0.224	9.82	1
10915	123678-HxCDD	57653-85-7	0.228	U	0.228	9.82	1
10915	123789-HxCDD	19408-74-3	0.238	U	0.238	9.82	1
10915	1234678-HpCDD	35822-46-9	1.24	JBQ	0.302	9.82	1
10915	OCDD	3268-87-9	3.54	JBQ	0.345	19.6	1
10915	2378-TCDF	51207-31-9	0.256	U	0.256	1.96	1
10915	12378-PeCDF	57117-41-6	0.387	JBQ	0.193	9.82	1
10915	23478-PeCDF	57117-31-4	0.707	JBQ	0.164	9.82	1
10915	123478-HxCDF	70648-26-9	0.429	JBQ	0.171	9.82	1
10915	123678-HxCDF	57117-44-9	0.244	JBQ	0.169	9.82	1
10915	123789-HxCDF	72918-21-9	0.633	JBQ	0.175	9.82	1
10915	234678-HxCDF	60851-34-5	0.432	JBQ	0.163	9.82	1
10915	1234678-HpCDF	67562-39-4	1.40	JBQ	0.118	9.82	1
10915	1234789-HpCDF	55673-89-7	0.257	JBQ	0.141	9.82	1
10915	OCDF	39001-02-0	1.35	JBQ	0.309	19.6	1

The recoveries of several labeled compounds were outside QC limits in this sample and the blank and OPR associated with this sample. The sample was re-extracted outside the project specified holding time with all labeled compound recoveries within QC specification. Comparable native compound results were observed between the two extractions.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	11	25 - 164
13C12-12378-PeCDD	28	25 - 181
13C12-123478-HxCDD	36	32 - 141
13C12-123678-HxCDD	34	28 - 130
13C12-123789-HxCDD	33	28 - 130
13C12-1234678-HpCDD	39	23 - 140
13C12-OCDD	38	17 - 157
13C12-2378-TCDF	38	24 - 169
13C12-12378-PeCDF	39	24 - 185
13C12-23478-PeCDF	43	21 - 178
13C12-123478-HxCDF	37	26 - 152
13C12-123678-HxCDF	36	26 - 123
13C12-234678-HxCDF	38	28 - 136
13C12-123789-HxCDF	41	29 - 147
13C12-1234678-HpCDF	39	28 - 143
13C12-1234789-HpCDF	38	26 - 138
13C12-OCDF	37	17 - 157
13C12-1278-TCDD (CRS)	22	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **EB02-SA5B-121410 Water**
SSFL Area IV Collocated Soil Sampling
EB02-SA5B-121410

LLI Sample # WW 6164972
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 12:30

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2303 SDG#: DX023-03EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor

E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	10362001	12/30/2010 18:22	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	10362001	12/28/2010 06:30	Ginelle L Haines	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164973
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2304 SDG#: DX023-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	16.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164973
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2304 SDG#: DX023-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0213 U	0.0213	1.20	1
11031	12378-PeCDD	40321-76-4	0.0388 JBQ	0.0296	6.01	1
11031	123478-HxCDD	39227-28-6	0.0292 JBQ	0.0202	6.01	1
11031	123678-HxCDD	57653-85-7	0.105 JBQ	0.0206	6.01	1
11031	123789-HxCDD	19408-74-3	0.179 JBQ	0.0210	6.01	1
11031	1234678-HpCDD	35822-46-9	0.407 JB	0.0300	6.01	1
11031	OCDD	3268-87-9	2.29 JB	0.0376	12.0	1
11031	2378-TCDF	51207-31-9	0.0294 JB	0.0213	1.20	1
11031	12378-PeCDF	57117-41-6	0.0580 JBQ	0.0105	6.01	1
11031	23478-PeCDF	57117-31-4	0.0956 JBQ	0.0114	6.01	1
11031	123478-HxCDF	70648-26-9	0.0588 JBQ	0.0160	6.01	1
11031	123678-HxCDF	57117-44-9	0.0610 JBQ	0.0133	6.01	1
11031	123789-HxCDF	72918-21-9	0.176 JB	0.0212	6.01	1
11031	234678-HxCDF	60851-34-5	0.107 JBQ	0.0154	6.01	1
11031	1234678-HpCDF	67562-39-4	0.234 JBQ	0.0117	6.01	1
11031	1234789-HpCDF	55673-89-7	0.0830 JBQ	0.0218	6.01	1
11031	OCDF	39001-02-0	0.329 JB	0.0425	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164973
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2304 SDG#: DX023-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-004-SA5C-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-9.0-10.0

LLI Sample # SW 6164973
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:18

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2304 SDG#: DX023-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 19:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164974
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2305 SDG#: DX023-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	16.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164974
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2305 SDG#: DX023-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0194 JBQ	0.0172	1.19	1
11031	12378-PeCDD	40321-76-4	0.0257 U	0.0257	5.97	1
11031	123478-HxCDD	39227-28-6	0.0166 JBQ	0.0136	5.97	1
11031	123678-HxCDD	57653-85-7	0.0419 JBQ	0.0140	5.97	1
11031	123789-HxCDD	19408-74-3	0.0354 JBQ	0.0136	5.97	1
11031	1234678-HpCDD	35822-46-9	0.176 JBQ	0.0248	5.97	1
11031	OCDD	3268-87-9	0.629 JBQ	0.0368	11.9	1
11031	2378-TCDF	51207-31-9	0.0142 U	0.0142	1.19	1
11031	12378-PeCDF	57117-41-6	0.00859 U	0.00859	5.97	1
11031	23478-PeCDF	57117-31-4	0.0602 JB	0.00895	5.97	1
11031	123478-HxCDF	70648-26-9	0.0414 JB	0.0113	5.97	1
11031	123678-HxCDF	57117-44-9	0.0260 JBQ	0.00943	5.97	1
11031	123789-HxCDF	72918-21-9	0.0640 JBQ	0.0138	5.97	1
11031	234678-HxCDF	60851-34-5	0.0394 JBQ	0.0107	5.97	1
11031	1234678-HpCDF	67562-39-4	0.104 JBQ	0.00979	5.97	1
11031	1234789-HpCDF	55673-89-7	0.0625 JB	0.0169	5.97	1
11031	OCDF	39001-02-0	0.148 JBQ	0.0298	11.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	58	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	77	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	52	17 - 157
13C12-1278-TCDD (CRS)	69	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-004-SA5C-SB-4.0-5.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164974
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2305 SDG#: DX023-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-004-SA5C-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-004-SA5C-SB-4.0-5.0

LLI Sample # SW 6164974
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:11

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2305 SDG#: DX023-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 19:56	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164975
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2306 SDG#: DX023-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	10.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164975
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2306 SDG#: DX023-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0257 U	0.0257	1.11	1
11031	12378-PeCDD	40321-76-4	0.0347 U	0.0347	5.56	1
11031	123478-HxCDD	39227-28-6	0.0187 U	0.0187	5.56	1
11031	123678-HxCDD	57653-85-7	0.0195 U	0.0195	5.56	1
11031	123789-HxCDD	19408-74-3	0.0405 JBQ	0.0201	5.56	1
11031	1234678-HpCDD	35822-46-9	0.117 JB	0.0288	5.56	1
11031	OCDD	3268-87-9	0.507 JBQ	0.0492	11.1	1
11031	2378-TCDF	51207-31-9	0.0185 U	0.0185	1.11	1
11031	12378-PeCDF	57117-41-6	0.0234 JBQ	0.0120	5.56	1
11031	23478-PeCDF	57117-31-4	0.0581 JBQ	0.0125	5.56	1
11031	123478-HxCDF	70648-26-9	0.0325 JBQ	0.0155	5.56	1
11031	123678-HxCDF	57117-44-9	0.0200 JBQ	0.0131	5.56	1
11031	123789-HxCDF	72918-21-9	0.0537 JB	0.0210	5.56	1
11031	234678-HxCDF	60851-34-5	0.0404 JBQ	0.0147	5.56	1
11031	1234678-HpCDF	67562-39-4	0.108 JB	0.0140	5.56	1
11031	1234789-HpCDF	55673-89-7	0.0727 JB	0.0253	5.56	1
11031	OCDF	39001-02-0	0.189 JBQ	0.0436	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	52	25 - 164
13C12-12378-PeCDD	63	25 - 181
13C12-123478-HxCDD	65	32 - 141
13C12-123678-HxCDD	65	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	52	17 - 157
13C12-2378-TCDF	59	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	55	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	53	26 - 138
13C12-OCDF	43	17 - 157
13C12-1278-TCDD (CRS)	64	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164975
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2306 SDG#: DX023-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-140-SA5C-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-140-SA5C-SB-3.0-4.0

LLI Sample # SW 6164975
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:28

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2306 SDG#: DX023-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 20:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10364162402A	12/31/2010 05:26	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164976
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2307 SDG#: DX023-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	12.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-024-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164976
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2307 SDG#: DX023-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0556	JB	0.0249	1.15	1
11031	12378-PeCDD	40321-76-4	0.333	JBQ	0.0529	5.73	1
11031	123478-HxCDD	39227-28-6	0.159	JB	0.0253	5.73	1
11031	123678-HxCDD	57653-85-7	0.441	JB	0.0267	5.73	1
11031	123789-HxCDD	19408-74-3	0.430	JB	0.0267	5.73	1
11031	1234678-HpCDD	35822-46-9	5.00	JB	0.0328	5.73	1
11031	OCDD	3268-87-9	32.0	B	0.0354	11.5	1
11031	2378-TCDF	51207-31-9	0.324	JB	0.0493	1.15	1
11031	12378-PeCDF	57117-41-6	0.275	JB	0.0205	5.73	1
11031	23478-PeCDF	57117-31-4	0.583	JB	0.0243	5.73	1
11031	123478-HxCDF	70648-26-9	0.219	JB	0.0170	5.73	1
11031	123678-HxCDF	57117-44-9	0.232	JB	0.0143	5.73	1
11031	123789-HxCDF	72918-21-9	0.0859	JBQ	0.0208	5.73	1
11031	234678-HxCDF	60851-34-5	0.253	JB	0.0158	5.73	1
11031	1234678-HpCDF	67562-39-4	1.22	JB	0.0167	5.73	1
11031	1234789-HpCDF	55673-89-7	0.119	JB	0.0294	5.73	1
11031	OCDF	39001-02-0	2.24	JB	0.0292	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	56	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	62	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	55	26 - 138
13C12-OCDF	43	17 - 157
13C12-1278-TCDD (CRS)	69	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-024-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164976
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2307 SDG#: DX023-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-024-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-024-SIV-SD-0.0-0.5

LLI Sample # SW 6164976
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 11:16

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2307 SDG#: DX023-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 21:49	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164977
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2308 SDG#: DX023-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	10.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164977
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2308 SDG#: DX023-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.133	JBQ	0.0315	1.12	1
11031	12378-PeCDD	40321-76-4	0.310	JB	0.0496	5.61	1
11031	123478-HxCDD	39227-28-6	0.223	JB	0.0243	5.61	1
11031	123678-HxCDD	57653-85-7	0.421	JB	0.0252	5.61	1
11031	123789-HxCDD	19408-74-3	0.391	JB	0.0233	5.61	1
11031	1234678-HpCDD	35822-46-9	5.10	JB	0.0324	5.61	1
11031	OCDD	3268-87-9	29.8	B	0.0323	11.2	1
11031	2378-TCDF	51207-31-9	0.366	JBQ	0.0478	1.12	1
11031	12378-PeCDF	57117-41-6	0.307	JBQ	0.0185	5.61	1
11031	23478-PeCDF	57117-31-4	0.570	JB	0.0187	5.61	1
11031	123478-HxCDF	70648-26-9	0.260	JB	0.0177	5.61	1
11031	123678-HxCDF	57117-44-9	0.215	JB	0.0149	5.61	1
11031	123789-HxCDF	72918-21-9	0.117	JB	0.0192	5.61	1
11031	234678-HxCDF	60851-34-5	0.238	JB	0.0169	5.61	1
11031	1234678-HpCDF	67562-39-4	0.994	JB	0.0165	5.61	1
11031	1234789-HpCDF	55673-89-7	0.132	JBQ	0.0270	5.61	1
11031	OCDF	39001-02-0	1.53	JB	0.0288	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	57	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164977
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2308 SDG#: DX023-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-023-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-023-SIV-SD-0.0-0.5

LLI Sample # SW 6164977
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 09:19

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2308 SDG#: DX023-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 22:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164978
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2309 SDG#: DX023-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	7.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164978
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2309 SDG#: DX023-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.184	JB	0.0335	1.08	1
11031	12378-PeCDD	40321-76-4	0.532	JB	0.0801	5.41	1
11031	123478-HxCDD	39227-28-6	0.986	JB	0.0528	5.41	1
11031	123678-HxCDD	57653-85-7	5.60	B	0.0543	5.41	1
11031	123789-HxCDD	19408-74-3	1.93	JB	0.0527	5.41	1
11031	1234678-HpCDD	35822-46-9	136	B	0.172	5.41	1
11031	OCDD	3268-87-9	1,310	B	0.113	10.8	1
11031	2378-TCDF	51207-31-9	0.473	JB	0.0584	1.08	1
11031	12378-PeCDF	57117-41-6	0.657	JB	0.0258	5.41	1
11031	23478-PeCDF	57117-31-4	0.792	JB	0.0267	5.41	1
11031	123478-HxCDF	70648-26-9	0.858	JB	0.0446	5.41	1
11031	123678-HxCDF	57117-44-9	1.06	JB	0.0385	5.41	1
11031	123789-HxCDF	72918-21-9	0.176	JB	0.0553	5.41	1
11031	234678-HxCDF	60851-34-5	1.35	JB	0.0424	5.41	1
11031	1234678-HpCDF	67562-39-4	29.1	B	0.0382	5.41	1
11031	1234789-HpCDF	55673-89-7	2.68	JB	0.0724	5.41	1
11031	OCDF	39001-02-0	80.4	B	0.0560	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	45	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-022-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164978
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2309 SDG#: DX023-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-022-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-022-SIV-SD-0.0-0.5

LLI Sample # SW 6164978
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 10:08

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2309 SDG#: DX023-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/15/2011 23:42	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164979
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2310 SDG#: DX023-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164979
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2310 SDG#: DX023-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.135	JBQ	0.0262	1.06	1
11031	12378-PeCDD	40321-76-4	0.843	JB	0.0570	5.28	1
11031	123478-HxCDD	39227-28-6	1.57	JB	0.0528	5.28	1
11031	123678-HxCDD	57653-85-7	3.86	JB	0.0551	5.28	1
11031	123789-HxCDD	19408-74-3	3.20	JB	0.0520	5.28	1
11031	1234678-HpCDD	35822-46-9	116	B	0.134	5.28	1
11031	OCDD	3268-87-9	1,280	B	0.0855	10.6	1
11031	2378-TCDF	51207-31-9	0.276	JBQ	0.0508	1.06	1
11031	12378-PeCDF	57117-41-6	0.659	JB	0.0226	5.28	1
11031	23478-PeCDF	57117-31-4	0.641	JB	0.0235	5.28	1
11031	123478-HxCDF	70648-26-9	0.887	JB	0.0445	5.28	1
11031	123678-HxCDF	57117-44-9	2.54	JB	0.0367	5.28	1
11031	123789-HxCDF	72918-21-9	0.718	JBQ	0.0526	5.28	1
11031	234678-HxCDF	60851-34-5	1.22	JB	0.0422	5.28	1
11031	1234678-HpCDF	67562-39-4	22.0	B	0.0313	5.28	1
11031	1234789-HpCDF	55673-89-7	1.91	JB	0.0560	5.28	1
11031	OCDF	39001-02-0	63.9	B	0.0620	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164979
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2310 SDG#: DX023-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-125-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-125-SA5B-SS-0.0-0.5

LLI Sample # SW 6164979
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:00

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2310 SDG#: DX023-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 03:41	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164980
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2311 SDG#: DX023-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164980
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2311 SDG#: DX023-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.126	JB	0.0193	1.05	1
11031	12378-PeCDD	40321-76-4	0.942	JB	0.0524	5.25	1
11031	123478-HxCDD	39227-28-6	1.87	JB	0.0440	5.25	1
11031	123678-HxCDD	57653-85-7	5.41	B	0.0454	5.25	1
11031	123789-HxCDD	19408-74-3	3.99	JB	0.0459	5.25	1
11031	1234678-HpCDD	35822-46-9	174	B	0.142	5.25	1
11031	OCDD	3268-87-9	1,800	B	0.102	10.5	1
11031	2378-TCDF	51207-31-9	0.318	JB	0.0446	1.05	1
11031	12378-PeCDF	57117-41-6	0.765	JB	0.0192	5.25	1
11031	23478-PeCDF	57117-31-4	0.742	JB	0.0194	5.25	1
11031	123478-HxCDF	70648-26-9	1.23	JB	0.0328	5.25	1
11031	123678-HxCDF	57117-44-9	1.75	JB	0.0297	5.25	1
11031	123789-HxCDF	72918-21-9	0.685	JB	0.0385	5.25	1
11031	234678-HxCDF	60851-34-5	1.23	JB	0.0317	5.25	1
11031	1234678-HpCDF	67562-39-4	33.0	B	0.0398	5.25	1
11031	1234789-HpCDF	55673-89-7	2.06	JB	0.0546	5.25	1
11031	OCDF	39001-02-0	103	B	0.0385	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164980
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2311 SDG#: DX023-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-126-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-126-SA5B-SS-0.0-0.5

LLI Sample # SW 6164980
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 14:20

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2311 SDG#: DX023-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 04:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164981
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2312 SDG#: DX023-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164981
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2312 SDG#: DX023-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.166 JBQ	0.0211	1.06	1
11031	12378-PeCDD	40321-76-4	1.94 JB	0.0523	5.28	1
11031	123478-HxCDD	39227-28-6	4.08 JB	0.0561	5.28	1
11031	123678-HxCDD	57653-85-7	23.9 B	0.0584	5.28	1
11031	123789-HxCDD	19408-74-3	8.22 B	0.0581	5.28	1
11031	1234678-HpCDD	35822-46-9	949 B	0.271	5.28	1
11031	OCDD	3268-87-9	11,200 EB	0.143	10.6	1
11031	2378-TCDF	51207-31-9	0.330 JB	0.0439	1.06	1
11031	12378-PeCDF	57117-41-6	0.687 JB	0.0197	5.28	1
11031	23478-PeCDF	57117-31-4	0.839 JB	0.0202	5.28	1
11031	123478-HxCDF	70648-26-9	3.48 JB	0.0545	5.28	1
11031	123678-HxCDF	57117-44-9	3.48 JB	0.0468	5.28	1
11031	123789-HxCDF	72918-21-9	1.15 JB	0.0626	5.28	1
11031	234678-HxCDF	60851-34-5	3.93 JB	0.0504	5.28	1
11031	1234678-HpCDF	67562-39-4	195 B	0.0627	5.28	1
11031	1234789-HpCDF	55673-89-7	9.95 B	0.0994	5.28	1
11031	OCDF	39001-02-0	773 B	0.0673	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	88	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	78	28 - 136

*=This limit was used in the evaluation of the final result

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164981
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2312 SDG#: DX023-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Labeled Compounds	%Rec	Windows
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-129-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-129-SA5B-SS-0.0-0.5

LLI Sample # SW 6164981
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:45

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2312 SDG#: DX023-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 05:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164982
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2313 SDG#: DX023-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164982
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2313 SDG#: DX023-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0810	JBQ	0.0186	1.06	1
11031	12378-PeCDD	40321-76-4	0.614	JB	0.0358	5.30	1
11031	123478-HxCDD	39227-28-6	1.09	JB	0.0284	5.30	1
11031	123678-HxCDD	57653-85-7	3.18	JB	0.0292	5.30	1
11031	123789-HxCDD	19408-74-3	2.57	JB	0.0290	5.30	1
11031	1234678-HpCDD	35822-46-9	89.1	B	0.0712	5.30	1
11031	OCDD	3268-87-9	920	B	0.0639	10.6	1
11031	2378-TCDF	51207-31-9	0.293	JB	0.0385	1.06	1
11031	12378-PeCDF	57117-41-6	0.463	JB	0.0160	5.30	1
11031	23478-PeCDF	57117-31-4	0.679	JB	0.0173	5.30	1
11031	123478-HxCDF	70648-26-9	0.674	JB	0.0279	5.30	1
11031	123678-HxCDF	57117-44-9	0.746	JB	0.0234	5.30	1
11031	123789-HxCDF	72918-21-9	0.640	JB	0.0351	5.30	1
11031	234678-HxCDF	60851-34-5	0.796	JB	0.0262	5.30	1
11031	1234678-HpCDF	67562-39-4	13.8	B	0.0232	5.30	1
11031	1234789-HpCDF	55673-89-7	1.01	JB	0.0405	5.30	1
11031	OCDF	39001-02-0	39.3	B	0.0291	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	100	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164982
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2313 SDG#: DX023-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-128-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-128-SA5B-SS-0.0-0.5

LLI Sample # SW 6164982
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 13:35

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2313 SDG#: DX023-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 06:31	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164983
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2314 SDG#: DX023-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	13.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164983
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2314 SDG#: DX023-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.141	JB	0.0358	1.16	1
11031	12378-PeCDD	40321-76-4	0.162	JBQ	0.0573	5.79	1
11031	123478-HxCDD	39227-28-6	0.220	JB	0.0481	5.79	1
11031	123678-HxCDD	57653-85-7	0.721	JB	0.0502	5.79	1
11031	123789-HxCDD	19408-74-3	0.471	JB	0.0476	5.79	1
11031	1234678-HpCDD	35822-46-9	11.3	B	0.0719	5.79	1
11031	OCDD	3268-87-9	148	B	0.0705	11.6	1
11031	2378-TCDF	51207-31-9	0.384	JBQ	0.0671	1.16	1
11031	12378-PeCDF	57117-41-6	0.588	JB	0.0301	5.79	1
11031	23478-PeCDF	57117-31-4	0.736	JB	0.0313	5.79	1
11031	123478-HxCDF	70648-26-9	0.418	JB	0.0505	5.79	1
11031	123678-HxCDF	57117-44-9	0.387	JB	0.0427	5.79	1
11031	123789-HxCDF	72918-21-9	0.375	JB	0.0602	5.79	1
11031	234678-HxCDF	60851-34-5	0.353	JB	0.0473	5.79	1
11031	1234678-HpCDF	67562-39-4	3.24	JB	0.0363	5.79	1
11031	1234789-HpCDF	55673-89-7	0.489	JB	0.0666	5.79	1
11031	OCDF	39001-02-0	8.78	JB	0.0550	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	75	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	48	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-027-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164983
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2314 SDG#: DX023-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-027-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-027-SIV-SD-0.0-0.5

LLI Sample # SW 6164983
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:59

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2314 SDG#: DX023-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 07:28	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164984
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2315 SDG#: DX023-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	13.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164984
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2315 SDG#: DX023-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0512	JBQ	0.0133	1.16	1
11031	12378-PeCDD	40321-76-4	0.376	JBQ	0.0331	5.80	1
11031	123478-HxCDD	39227-28-6	0.684	JB	0.0223	5.80	1
11031	123678-HxCDD	57653-85-7	4.59	JB	0.0227	5.80	1
11031	123789-HxCDD	19408-74-3	1.60	JB	0.0213	5.80	1
11031	1234678-HpCDD	35822-46-9	76.7	B	0.0729	5.80	1
11031	OCDD	3268-87-9	1,490	B	0.0773	11.6	1
11031	2378-TCDF	51207-31-9	0.426	JB	0.0383	1.16	1
11031	12378-PeCDF	57117-41-6	1.91	JB	0.0142	5.80	1
11031	23478-PeCDF	57117-31-4	0.871	JB	0.0147	5.80	1
11031	123478-HxCDF	70648-26-9	0.673	JB	0.0182	5.80	1
11031	123678-HxCDF	57117-44-9	0.673	JB	0.0151	5.80	1
11031	123789-HxCDF	72918-21-9	0.377	JB	0.0202	5.80	1
11031	234678-HxCDF	60851-34-5	0.683	JB	0.0173	5.80	1
11031	1234678-HpCDF	67562-39-4	13.4	B	0.0194	5.80	1
11031	1234789-HpCDF	55673-89-7	0.727	JB	0.0302	5.80	1
11031	OCDF	39001-02-0	50.3	B	0.0202	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	67	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-026-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164984
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2315 SDG#: DX023-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-026-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-026-SIV-SD-0.0-0.5

LLI Sample # SW 6164984
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 15:22

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2315 SDG#: DX023-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/17/2011 22:22	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10350162401A	12/16/2010 09:20	William C Schwebel	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164985
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2316 SDG#: DX023-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	12.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164985
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2316 SDG#: DX023-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0302 JB	0.0161	1.15	1
11031	12378-PeCDD	40321-76-4	0.0657 JBQ	0.0230	5.74	1
11031	123478-HxCDD	39227-28-6	0.0317 JBQ	0.0181	5.74	1
11031	123678-HxCDD	57653-85-7	0.124 JB	0.0186	5.74	1
11031	123789-HxCDD	19408-74-3	0.155 JBQ	0.0188	5.74	1
11031	1234678-HpCDD	35822-46-9	1.38 JB	0.0257	5.74	1
11031	OCDD	3268-87-9	19.0 B	0.0307	11.5	1
11031	2378-TCDF	51207-31-9	0.0138 U	0.0138	1.15	1
11031	12378-PeCDF	57117-41-6	0.0816 JB	0.00907	5.74	1
11031	23478-PeCDF	57117-31-4	0.114 JBQ	0.00987	5.74	1
11031	123478-HxCDF	70648-26-9	0.0766 JBQ	0.0172	5.74	1
11031	123678-HxCDF	57117-44-9	0.0531 JB	0.0145	5.74	1
11031	123789-HxCDF	72918-21-9	0.132 JBQ	0.0202	5.74	1
11031	234678-HxCDF	60851-34-5	0.0566 JB	0.0161	5.74	1
11031	1234678-HpCDF	67562-39-4	0.304 JBQ	0.0156	5.74	1
11031	1234789-HpCDF	55673-89-7	0.0571 JBQ	0.0281	5.74	1
11031	OCDF	39001-02-0	0.536 JBQ	0.0269	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	56	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-060-SA5C-SB-10.0-11.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164985
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2316 SDG#: DX023-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-060-SA5C-SB-10.0-11.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-060-SA5C-SB-10.0-11.0

LLI Sample # SW 6164985
LLI Group # 1225550
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/14/2010 16:18

Submitted: 12/15/2010 09:40
Reported: 02/02/2011 17:39

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2316 SDG#: DX023-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11005001	01/16/2011 09:21	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11005001	01/05/2011 15:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11005162401A	01/05/2011 18:13	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225550
Reported: 02/02/11 at 05:39 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10350162401A	Sample number(s): 6164976-6164984								
28a Moisture Content by 160.3					100		80-120		
Batch number: 10364162402A	Sample number(s): 6164971,6164973-6164975								
28a Moisture Content by 160.3					100		80-120		
Batch number: 10364162402B	Sample number(s): 6164970								
28a Moisture Content by 160.3					100		80-120		
Batch number: 11005162401A	Sample number(s): 6164985								
28a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 10362001	Sample number(s): 6164972								
2378-TCDD	2.81	1.76	2.00	pg/l	89		67-158		
12378-PeCDD	0.684 J	0.492	10.0	pg/l	96		70-142		
123478-HxCDD	0.485 J	0.235	10.0	pg/l	106		70-164		
123678-HxCDD	0.512 J	0.243	10.0	pg/l	104		76-134		
123789-HxCDD	0.483 J	0.269	10.0	pg/l	106		64-162		
1234678-HpCDD	1.35 J	0.246	10.0	pg/l	108		70-140		
OCDD	2.39 J	0.274	20.0	pg/l	118		78-144		
2378-TCDF	0.181 J	0.166	2.00	pg/l	95		75-158		
12378-PeCDF	0.474 J	0.125	10.0	pg/l	104		80-134		
23478-PeCDF	0.810 J	0.113	10.0	pg/l	102		68-160		
123478-HxCDF	0.599 J	0.136	10.0	pg/l	111		72-134		
123678-HxCDF	0.568 J	0.132	10.0	pg/l	113		84-130		
123789-HxCDF	0.637 J	0.143	10.0	pg/l	111		78-130		
234678-HxCDF	0.505 J	0.136	10.0	pg/l	109		70-156		
1234678-HpCDF	1.41 J	0.122	10.0	pg/l	116		82-122		
1234789-HpCDF	0.582 J	0.148	10.0	pg/l	117		78-138		
OCDF	1.43 J	0.269	20.0	pg/l	122		63-170		
Batch number: 11005001	Sample number(s): 6164970-6164971,6164973-6164985								
2378-TCDD	0.0282 J	0.0170	1.00	ng/kg	106		67-158		
12378-PeCDD	0.0679 J	0.0271	5.00	ng/kg	105		70-142		
123478-HxCDD	0.0533 J	0.0252	5.00	ng/kg	107		70-164		
123678-HxCDD	0.0419 J	0.0257	5.00	ng/kg	106		76-134		
123789-HxCDD	0.0658 J	0.0246	5.00	ng/kg	107		64-162		
1234678-HpCDD	0.225 J	0.0346	5.00	ng/kg	104		70-140		
OCDD	0.570 J	0.0410	10.0	ng/kg	104		78-144		
2378-TCDF	0.0270 J	0.0161	1.00	ng/kg	113		75-158		
12378-PeCDF	0.0507 J	0.0109	5.00	ng/kg	104		80-134		
23478-PeCDF	0.0914 J	0.0120	5.00	ng/kg	107		68-160		
123478-HxCDF	0.0754 J	0.0179	5.00	ng/kg	101		72-134		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225550
Reported: 02/02/11 at 05:39 PM

Analysis Name	Blank Result		Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
123678-HxCDF	0.0628	J	0.0140	5.00	ng/kg	99		84-130		
123789-HxCDF	0.161	J	0.0212	5.00	ng/kg	102		78-130		
234678-HxCDF	0.0900	J	0.0162	5.00	ng/kg	101		70-156		
1234678-HpCDF	0.149	J	0.0144	5.00	ng/kg	99		82-122		
1234789-HpCDF	0.113	J	0.0296	5.00	ng/kg	101		78-138		
OCDF	0.344	J	0.0458	10.0	ng/kg	103		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10350162401A	Sample number(s): 6164976-6164984 BKG: P154843								
28a Moisture Content by 160.3						12.4	13.1	6	20
Batch number: 10364162402A	Sample number(s): 6164971,6164973-6164975 BKG: P167525								
28a Moisture Content by 160.3						11.9	12.1	1	20
Batch number: 10364162402B	Sample number(s): 6164970 BKG: P163871								
28a Moisture Content by 160.3						11.4	11.7	3	20
Batch number: 11005162401A	Sample number(s): 6164985 BKG: P168986								
28a Moisture Content by 160.3						10.0	9.9	1	20
Batch number: 11005001	Sample number(s): 6164970-6164971,6164973-6164985 UNSPK: P165384								
2378-TCDD	105	103	67-158	2	25				
12378-PeCDD	106	105	70-142	1	25				
123478-HxCDD	106	107	70-164	1	25				
123678-HxCDD	108	104	76-134	4	25				
123789-HxCDD	107	106	64-162	1	25				
1234678-HpCDD	98	106	70-140	7	25				
OCDD	53*	102	78-144	36*	25				
2378-TCDF	109	107	75-158	2	25				
12378-PeCDF	105	105	80-134	1	25				
23478-PeCDF	105	104	68-160	0	25				
123478-HxCDF	102	100	72-134	2	25				
123678-HxCDF	99	100	84-130	0	25				
123789-HxCDF	101	99	78-130	3	25				
234678-HxCDF	101	101	70-156	0	25				
1234678-HpCDF	99	101	82-122	2	25				
1234789-HpCDF	101	101	78-138	0	25				
OCDF	100	105	63-170	4	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B
Batch number: 10362001

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225550
Reported: 02/02/11 at 05:39 PM

Surrogate Quality Control

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6164972	11*	43	37	36	38	41
Blank	6*	70	67	66	66	69
OPR	10*	63	56	55	57	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6164972	39	38	37	22*	28	36
Blank	64	61	54	11*	32	58
OPR	55	54	48	17*	37	52
Limits:	28-143	26-138	17-157	35-197	25-181	32-141

	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6164972	34	33	39	38	38	39
Blank	54	49	63	55	57	68
OPR	50	46	56	48	51	60
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11005001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6164970	62	73	74	76	73	72
6164971	64	73	72	83	74	69
6164973	66	72	70	83	71	62
6164974	58	70	67	77	68	62
6164975	52	64	63	70	63	55
6164976	63	67	66	74	67	62
6164977	70	81	77	85	78	76
6164978	69	77	73	81	75	66
6164979	73	79	75	85	76	70
6164980	73	82	77	83	78	76
6164981	73	80	76	85	78	75
6164982	70	76	73	84	75	67
6164983	68	76	71	80	73	66
6164984	62	69	70	80	72	67
6164985	71	75	71	82	74	68
Blank	62	63	60	72	63	56
MS	69	79	75	85	76	70
MSD	78	87	84	87	82	84
OPR	63	64	64	73	66	62
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6164970	81	67	56	77	70	73
6164971	92	65	56	75	75	76
6164973	95	61	53	76	74	75

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225550
Reported: 02/02/11 at 05:39 PM

Surrogate Quality Control

6164974	87	60	52	69	70	71
6164975	78	53	43	64	63	65
6164976	80	55	43	69	66	68
6164977	93	69	57	81	80	80
6164978	89	58	45	78	77	77
6164979	95	64	51	80	80	80
6164980	83	71	59	79	81	79
6164981	91	69	60	78	79	79
6164982	100	69	61	78	79	79
6164983	90	60	48	79	78	78
6164984	87	66	60	67	67	72
6164985	96	64	56	80	77	77
Blank	85	51	41	76	69	71
MS	94	65	57	79	79	80
MSD	91	80	72	85	83	83
OPR	83	59	49	71	69	70
Limits:	28-143	26-138	17-157	35-197	25-181	32-141

	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6164970	72	71	71	64	68	75
6164971	75	75	74	68	67	82
6164973	75	74	74	67	69	82
6164974	71	71	70	63	64	77
6164975	65	63	63	52	59	70
6164976	67	68	67	56	67	74
6164977	79	81	79	69	74	88
6164978	77	77	74	63	75	85
6164979	79	80	77	68	77	87
6164980	77	78	76	71	78	88
6164981	78	79	79	76	77	88
6164982	79	79	82	76	71	85
6164983	75	76	75	63	73	84
6164984	71	72	72	70	65	76
6164985	76	77	79	70	74	86
Blank	69	70	68	61	60	73
MS	78	79	77	70	75	87
MSD	81	82	82	75	83	89
OPR	70	70	71	62	62	73
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1225550 6164970-85

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-ETH EPA 8015B Mod.	*Metals EPA 6010/6020/7470A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151A (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	*Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-002-SA5C-SB-4.0-5.0	12.14.10	0942	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-002-SA5C-SB-9.0-10.0	12.14.10	0950	soil	none	3 x 4 oz. jars & 3 x 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
TB-121410	12.14.10	0800	water	HCl	2-40 mL VOA vials	X	X		X																				trip blank
EB02-SA5B-121410	12.14.10	1230	water	none	6-1 liter ambers			X						X	X			X	X										rinsate
EB02-SA5B-121410	12.14.10	1230	water	none	1-500 ml poly							X	X			X													rinsate
EB02-SA5B-121410	12.14.10	1230	water	HNO3	1-500 ml poly						X																		rinsate
EB02-SA5B-121410	12.14.10	1230	water	HCl	6-40 mL amber VOA vials	X	X		X																				rinsate
SL-002-SA5C-SB-9.5	12.14.10	0948	soil	none	5 Encore Samplers	X	X		X																				
SL-002-SA5C-SB-4.5	12.14.10	0938	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-4.5	12.14.10	1104	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-9.5	12.14.10	1115	soil	none	5 Encore Samplers	X	X		X																				
SL-004-SA5C-SB-9.0-10.0	12.14.10	1118	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-004-SA5C-SB-4.0-5.0	12.14.10	1111	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-140-SA5C-SB-3.0-4.0	12.14.10	1428	soil	none	2 x 16 oz. jars			X			X	X	X	X	X	X													
SL-140-SA5C-SB-3.5	12.14.10	1425	soil	none	5 Encore Samplers	X	X																						
DUP05-SA5B-QC-121410	12.14.10	0850	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									DUP
SL-120-SA5B-SS-0.0-0.5MS	12.14.10	0847	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X			X	X									MS/MSD
SL-108-SA5B-SS-0.0-0.5	12.14.10	0855	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-119-SA5B-SS-0.0-0.5	12.14.10	0830	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-240-SA5B-SS-0.0-0.5	12.14.10	0933	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-109-SA5B-SS-0.0-0.5	12.14.10	0909	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-122-SA5B-SS-0.0-0.5	12.14.10	0940	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-121-SA5B-SS-0.0-0.5	12.14.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-054-SA5B-SS-0.0-0.5	12.14.10	0921	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-105-SA5B-SS-0.0-0.5	12.14.10	0835	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-098-SA5B-SS-0.0-0.5	12.14.10	1043	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X	X									
SL-142-SA5B-SS-0.0-0.5	12.14.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-143-SA5B-SS-0.0-0.5	12.14.10	1115	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-123-SA5B-SS-0.0-0.5	12.14.10	1040	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-124-SA5B-SS-0.0-0.5	12.14.10	1100	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-309-SA5B-SS-0.0-0.5	12.14.10	1325	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-311-SA5B-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-310-SA5B-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-312-SA5B-SS-0.0-0.5	12.14.10	1427	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-025-SIV-SD-0.0-0.5	12.14.10	1244	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-024-SIV-SD-0.0-0.5	12.14.10	1116	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X	X									
SED-023-SIV-SD-0.0-0.5	12.14.10	0919	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-022-SIV-SD-0.0-0.5	12.14.10	1008	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-125-SA5B-SS-0.0-0.5	12.14.10	1400	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-126-SA5B-SS-0.0-0.5	12.14.10	1420	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-129-SA5B-SS-0.0-0.5	12.14.10	1345	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-128-SA5B-SS-0.0-0.5	12.14.10	1335	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-027-SIV-SD-0.0-0.5	12.14.10	1559	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SED-026-SIV-SD-0.0-0.5	12.14.10	1522	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X			X	X									
SL-060-SA5C-SB-10.0-11.0	12.14.10	1618	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-060-SA5C-SB-10.5	12.14.10	1614	soil	none	5 Encore Samplers	X	X		X																				

Relinquished by: *(Signature)*	Date/Time	Received for Laboratory by: (Signature)	Date/Time
	12.14.10 1700		12/15/10 946
Received by: (Signature)	Date/Time	Airbill No.	
		00732992	
		Tracking Number 869514317156	

Laboratory: Lancaster Laboratories, Inc.

No. of coolers = 5

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

January 24, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/16/2010
Group Number: 1225757
SDG: DE040
PO Number: 1203-004-007-AL
Release Number: Tracking #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-132-SA5B-SS-0.0-0.5 Grab Soil	6166074
SL-133-SA5B-SS-0.0-0.5 Grab Soil	6166075
SL-131-SA5B-SS-0.0-0.5 Grab Soil	6166076
SL-135-SA5B-SS-0.0-0.5 Grab Soil	6166077
SL-134-SA5B-SS-0.0-0.5 Grab Soil	6166078
SED-021-SIV-SD-0.0-0.5 Grab Soil	6166079
SED-018-SIV-SD-0.0-0.5 Grab Soil	6166080
SED-016-SIV-SD-0.0-0.5 Grab Soil	6166082
SL-153-SA5B-SS-0.0-0.5 Grab Soil	6166083
SL-155-SA5B-SS-0.0-0.5 Grab Soil	6166084
SL-149-SA5B-SS-0.0-0.5 Grab Soil	6166085
SL-156-SA5B-SS-0.0-0.5 Grab Soil	6166086
SL-150-SA5B-SS-0.0-0.5 Grab Soil	6166087
SL-181-SA5B-SS-0.0-0.5 Grab Soil	6166088
SL-136-SA5B-SS-0.0-0.5 Grab Soil	6166089
SL-203-SA5B-SS-0.0-0.5 Grab Soil	6166090
SL-257-SA5B-SS-0.0-0.5 Grab Soil	6166091
SL-204-SA5B-SS-0.0-0.5 Grab Soil	6166092

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program Attn: Todd Burgesser

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

COPY TO
1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

Robert Heisey
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166074
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL132 SDG#: DE040-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	940	U	940	2,800	1
04688	Benzidine	92-87-5	6,600	U	6,600	19,000	1
04688	Benzoic acid	65-85-0	940	U	940	2,800	1
04688	Benzyl alcohol	100-51-6	940	U	940	2,800	1
04688	4-Bromophenyl-phenylether	101-55-3	94	U	94	940	1
04688	Butylbenzylphthalate	85-68-7	94	U	94	940	1
04688	Di-n-butylphthalate	84-74-2	94	U	94	940	1
04688	Carbazole	86-74-8	94	U	94	940	1
04688	4-Chloro-3-methylphenol	59-50-7	190	U	190	940	1
04688	4-Chloroaniline	106-47-8	380	U	380	940	1
04688	bis(2-Chloroethoxy)methane	111-91-1	94	U	94	940	1
04688	bis(2-Chloroethyl)ether	111-44-4	94	U	94	940	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	94	U	94	940	1
04688	2-Chloronaphthalene	91-58-7	94	U	94	940	1
04688	2-Chlorophenol	95-57-8	94	U	94	940	1
04688	4-Chlorophenyl-phenylether	7005-72-3	190	U	190	940	1
04688	Dibenzofuran	132-64-9	94	U	94	940	1
04688	1,2-Dichlorobenzene	95-50-1	94	U	94	940	1
04688	1,3-Dichlorobenzene	541-73-1	94	U	94	940	1
04688	1,4-Dichlorobenzene	106-46-7	94	U	94	940	1
04688	3,3'-Dichlorobenzidine	91-94-1	560	U	560	1,900	1
04688	2,4-Dichlorophenol	120-83-2	94	U	94	940	1
04688	Diethylphthalate	84-66-2	94	U	94	940	1
04688	2,4-Dimethylphenol	105-67-9	190	U	190	940	1
04688	3,5-Dimethylphenol	108-68-9	190	U	190	940	1
04688	Dimethylphthalate	131-11-3	94	U	94	940	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	940	U	940	2,800	1
04688	2,4-Dinitrophenol	51-28-5	3,800	U	3,800	11,000	1
04688	2,4-Dinitrotoluene	121-14-2	190	U	190	940	1
04688	2,6-Dinitrotoluene	606-20-2	94	U	94	940	1
04688	1,2-Diphenylhydrazine	122-66-7	94	U	94	940	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	94	U	94	1,900	1
04688	Hexachlorobenzene	118-74-1	94	U	94	940	1
04688	Hexachlorobutadiene	87-68-3	380	U	380	940	1
04688	Hexachlorocyclopentadiene	77-47-4	940	U	940	2,800	1
04688	Hexachloroethane	67-72-1	94	U	94	940	1
04688	Isophorone	78-59-1	94	U	94	940	1
04688	2-Methylphenol	95-48-7	190	U	190	940	1
04688	4-Methylphenol	106-44-5	190	U	190	940	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	94	U	94	940	1
04688	3-Nitroaniline	99-09-2	190	U	190	940	1
04688	4-Nitroaniline	100-01-6	380	U	380	940	1
04688	Nitrobenzene	98-95-3	94	U	94	940	1
04688	2-Nitrophenol	88-75-5	94	U	94	940	1
04688	4-Nitrophenol	100-02-7	940	U	940	2,800	1
04688	N-Nitroso-di-n-propylamine	621-64-7	94	U	94	940	1
04688	N-Nitrosodiphenylamine	86-30-6	94	U	94	940	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166074
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL132 SDG#: DE040-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	94	U	94	940	1
04688	Pentachlorophenol	87-86-5	940	U	940	2,800	1
04688	Phenol	108-95-2	94	U	94	940	1
04688	1,2,4-Trichlorobenzene	120-82-1	94	U	94	940	1
04688	2,4,5-Trichlorophenol	95-95-4	190	U	190	940	1
04688	2,4,6-Trichlorophenol	88-06-2	190	U	190	940	1
	Reporting limits were raised due to interference from the sample matrix.						
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	19	U	19	47	5
10138	Acenaphthylene	208-96-8	9.4	U	9.4	47	5
10138	Anthracene	120-12-7	9.4	U	9.4	47	5
10138	Benzo(a)anthracene	56-55-3	19	U	19	47	5
10138	Benzo(a)pyrene	50-32-8	19	U	19	47	5
10138	Benzo(b)fluoranthene	205-99-2	22	J	19	47	5
10138	Benzo(g,h,i)perylene	191-24-2	24	J	19	47	5
10138	Benzo(k)fluoranthene	207-08-9	19	U	19	47	5
10138	Chrysene	218-01-9	29	J	9.4	47	5
10138	Dibenz(a,h)anthracene	53-70-3	19	U	19	47	5
10138	Fluoranthene	206-44-0	22	J	19	47	5
10138	Fluorene	86-73-7	19	U	19	47	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	19	U	19	47	5
10138	1-Methylnaphthalene	90-12-0	69		19	47	5
10138	2-Methylnaphthalene	91-57-6	72		19	47	5
10138	Naphthalene	91-20-3	160		19	47	5
10138	N-Nitrosodimethylamine	62-75-9	19	U	19	47	5
10138	Phenanthrene	85-01-8	120		19	47	5
10138	Pyrene	129-00-0	25	J	19	47	5
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1	1
10401	Dalapon	75-99-0	5.0	U	5.0	10	1
10401	2,4-DB	94-82-6	7.2		0.70	1.9	1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.4	1
10401	Dinoseb	88-85-7	0.90	U	0.90	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U	0.90	1.9	1
10401	MCPA	94-74-6	180	J	86	280	1
10401	MCPP (Mecoprop)	93-65-2	210	U	210	280	1
10401	2,4,5-T	93-76-5	0.28		0.092	0.19	1
10401	2,4,5-TP	93-72-1	0.084	U	0.084	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166074
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL132 SDG#: DE040-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compound was affected: MCPP.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.34	U	0.34	0.86	1
01363	Alpha BHC	319-84-6	0.18	U	0.18	0.86	1
01363	Beta BHC	319-85-7	1.0		0.31	0.86	1
01363	Gamma BHC - Lindane	58-89-9	0.31	U	0.31	0.86	1
01363	Chlordane	57-74-9	570		21	88	5
01363	p,p-DDD	72-54-8	1.7	U	1.7	8.8	5
01363	p,p-DDE	72-55-9	1.7	U	1.7	8.8	5
01363	p,p-DDT	50-29-3	9.2	U	9.2	9.2	5
01363	Delta BHC	319-86-8	0.26	U	0.26	0.86	1
01363	Dieldrin	60-57-1	1.7	U	1.7	8.8	5
01363	Endosulfan I	959-98-8	1.1	U	1.1	4.3	5
01363	Endosulfan II	33213-65-9	1.7	U	1.7	8.8	5
01363	Endosulfan Sulfate	1031-07-8	1.7	U	1.7	8.8	5
01363	Endrin	72-20-8	1.7	U	1.7	8.8	5
01363	Endrin Aldehyde	7421-93-4	13	U	13	13	5
01363	Endrin Ketone	53494-70-5	6.1	U	6.1	8.8	5
01363	Heptachlor	76-44-8	0.36	J	0.31	0.86	1
01363	Heptachlor Epoxide	1024-57-3	0.88	U	0.88	4.3	5
01363	Methoxychlor	72-43-5	8.8	U	8.8	43	5
01363	Mirex	2385-85-5	1.7	U	1.7	8.8	5
01363	Toxaphene	8001-35-2	57	U	57	170	5
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.						
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	23	U	23	74	20
10225	Aroclor 5442	12642-23-8	23	U	23	74	20
10225	Aroclor 5460	11126-42-4	23	U	23	74	20
10225	PCB-1016	12674-11-2	7.4	U	7.4	38	20
10225	PCB-1221	11104-28-2	11	U	11	38	20
10225	PCB-1232	11141-16-5	12	U	12	38	20
10225	PCB-1242	53469-21-9	11	U	11	38	20
10225	PCB-1248	12672-29-6	7.4	U	7.4	38	20
10225	PCB-1254	11097-69-1	49		7.4	38	20
10225	PCB-1260	11096-82-5	7.4	U	7.4	38	20
10225	PCB-1262	37324-23-5	7.4	U	7.4	38	20
10225	PCB-1268	11100-14-4	7.4	U	7.4	38	20

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166074
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL132 SDG#: DE040-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,000		5.50	21.9	1
07914	Boron	7440-42-8	6.95		0.973	5.47	1
01650	Calcium	7440-70-2	3,050		6.70	21.9	1
01654	Iron	7439-89-6	20,200		5.15	21.9	1
01656	Lithium	7439-93-2	15.5		0.24	2.2	1
01657	Magnesium	7439-95-4	3,690		2.78	10.9	1
06958	Manganese	7439-96-5	219		0.0853	0.547	1
10145	Phosphorus	7723-14-0	399		0.612	10.9	1
01662	Potassium	7440-09-7	2,520		19.7	54.7	1
01667	Sodium	7440-23-5	129		40.8	109	1
07968	Strontium	7440-24-6	26.7		0.0678	0.547	1
06969	Tin	7440-31-5	2.60	J	1.09	10.9	1
06970	Titanium	7440-32-6	1,200		0.415	1.09	1
10146	Zirconium	7440-67-7	2.36	J	0.918	5.47	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0662	U	0.0662	0.221	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	3.84		0.0662	0.442	2
06126	Barium	7440-39-3	84.9		0.119	0.442	2
06127	Beryllium	7440-41-7	0.489		0.0177	0.110	2
06128	Cadmium	7440-43-9	0.138		0.0397	0.110	2
06131	Chromium	7440-47-3	22.6		0.132	0.442	2
06132	Cobalt	7440-48-4	5.22		0.0221	0.110	2
06133	Copper	7440-50-8	8.60		0.0729	0.442	2
06135	Lead	7439-92-1	19.8		0.0115	0.221	2
06138	Molybdenum	7439-98-7	0.505		0.0552	0.110	2
06139	Nickel	7440-02-0	14.3		0.110	0.442	2
06141	Selenium	7782-49-2	0.130	J	0.0442	0.442	2
06142	Silver	7440-22-4	0.109	J	0.0132	0.110	2
06145	Thallium	7440-28-0	0.197		0.0331	0.110	2
06148	Vanadium	7440-62-2	37.2		0.0243	0.110	2
06149	Zinc	7440-66-6	76.6		0.618	3.31	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0031	U	0.0031	0.108	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.90	U	0.90	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1	U	10.1	33.8	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.73	J	0.23	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166074
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL132 SDG#: DE040-01

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	403	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	6.86	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	11.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/15/2011 17:09	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 08:11	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 11:36	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 01:51	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 02:05	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 15:13	Lindsey K Lafferty	20
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 13:34	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 13:34	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 13:34	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166074
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL132 SDG#: DE040-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 13:34	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 13:34	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 13:34	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 12:38	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:00	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:00	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:00	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:00	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 05:49	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/11/2011 22:11	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 02:01	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 15:20	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL133 SDG#: DE040-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	1,800	U	1,800	5,400	1
04688	Benzidine	92-87-5	13,000	U	13,000	36,000	1
04688	Benzoic acid	65-85-0	1,800	U	1,800	5,400	1
04688	Benzyl alcohol	100-51-6	1,800	U	1,800	5,400	1
04688	4-Bromophenyl-phenylether	101-55-3	180	U	180	1,800	1
04688	Butylbenzylphthalate	85-68-7	180	U	180	1,800	1
04688	Di-n-butylphthalate	84-74-2	180	U	180	1,800	1
04688	Carbazole	86-74-8	180	U	180	1,800	1
04688	4-Chloro-3-methylphenol	59-50-7	360	U	360	1,800	1
04688	4-Chloroaniline	106-47-8	720	U	720	1,800	1
04688	bis(2-Chloroethoxy)methane	111-91-1	180	U	180	1,800	1
04688	bis(2-Chloroethyl)ether	111-44-4	180	U	180	1,800	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	180	U	180	1,800	1
04688	2-Chloronaphthalene	91-58-7	180	U	180	1,800	1
04688	2-Chlorophenol	95-57-8	180	U	180	1,800	1
04688	4-Chlorophenyl-phenylether	7005-72-3	360	U	360	1,800	1
04688	Dibenzofuran	132-64-9	180	U	180	1,800	1
04688	1,2-Dichlorobenzene	95-50-1	180	U	180	1,800	1
04688	1,3-Dichlorobenzene	541-73-1	180	U	180	1,800	1
04688	1,4-Dichlorobenzene	106-46-7	180	U	180	1,800	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,100	U	1,100	3,600	1
04688	2,4-Dichlorophenol	120-83-2	180	U	180	1,800	1
04688	Diethylphthalate	84-66-2	180	U	180	1,800	1
04688	2,4-Dimethylphenol	105-67-9	360	U	360	1,800	1
04688	3,5-Dimethylphenol	108-68-9	360	U	360	1,800	1
04688	Dimethylphthalate	131-11-3	180	U	180	1,800	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,800	U	1,800	5,400	1
04688	2,4-Dinitrophenol	51-28-5	7,200	U	7,200	21,000	1
04688	2,4-Dinitrotoluene	121-14-2	360	U	360	1,800	1
04688	2,6-Dinitrotoluene	606-20-2	180	U	180	1,800	1
04688	1,2-Diphenylhydrazine	122-66-7	180	U	180	1,800	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	180	U	180	3,600	1
04688	Hexachlorobenzene	118-74-1	180	U	180	1,800	1
04688	Hexachlorobutadiene	87-68-3	720	U	720	1,800	1
04688	Hexachlorocyclopentadiene	77-47-4	1,800	U	1,800	5,400	1
04688	Hexachloroethane	67-72-1	180	U	180	1,800	1
04688	Isophorone	78-59-1	180	U	180	1,800	1
04688	2-Methylphenol	95-48-7	360	U	360	1,800	1
04688	4-Methylphenol	106-44-5	360	U	360	1,800	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	180	U	180	1,800	1
04688	3-Nitroaniline	99-09-2	360	U	360	1,800	1
04688	4-Nitroaniline	100-01-6	720	U	720	1,800	1
04688	Nitrobenzene	98-95-3	180	U	180	1,800	1
04688	2-Nitrophenol	88-75-5	180	U	180	1,800	1
04688	4-Nitrophenol	100-02-7	1,800	U	1,800	5,400	1
04688	N-Nitroso-di-n-propylamine	621-64-7	180	U	180	1,800	1
04688	N-Nitrosodiphenylamine	86-30-6	180	U	180	1,800	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL133 SDG#: DE040-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	180	U	180	1,800	1
04688	Pentachlorophenol	87-86-5	1,800	U	1,800	5,400	1
04688	Phenol	108-95-2	180	U	180	1,800	1
04688	1,2,4-Trichlorobenzene	120-82-1	180	U	180	1,800	1
04688	2,4,5-Trichlorophenol	95-95-4	360	U	360	1,800	1
04688	2,4,6-Trichlorophenol	88-06-2	360	U	360	1,800	1
	Reporting limits were raised due to interference from the sample matrix.						
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	36	U	36	89	5
10138	Acenaphthylene	208-96-8	18	U	18	89	5
10138	Anthracene	120-12-7	18	U	18	89	5
10138	Benzo(a)anthracene	56-55-3	36	U	36	89	5
10138	Benzo(a)pyrene	50-32-8	44	J	36	89	5
10138	Benzo(b)fluoranthene	205-99-2	170		36	89	5
10138	Benzo(g,h,i)perylene	191-24-2	120		36	89	5
10138	Benzo(k)fluoranthene	207-08-9	36	U	36	89	5
10138	Chrysene	218-01-9	140		18	89	5
10138	Dibenz(a,h)anthracene	53-70-3	52	J	36	89	5
10138	Fluoranthene	206-44-0	36	U	36	89	5
10138	Fluorene	86-73-7	36	U	36	89	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	39	J	36	89	5
10138	1-Methylnaphthalene	90-12-0	36	U	36	89	5
10138	2-Methylnaphthalene	91-57-6	36	U	36	89	5
10138	Naphthalene	91-20-3	230		36	89	5
10138	N-Nitrosodimethylamine	62-75-9	36	U	36	89	5
10138	Phenanthrene	85-01-8	36	U	36	89	5
10138	Pyrene	129-00-0	36	U	36	89	5
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.7	1
10401	2,4-DB	94-82-6	2.2		0.67	1.8	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.86	U	0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86	U	0.86	1.8	1
10401	MCPA	94-74-6	82	U	82	270	1
10401	MCPP (Mecoprop)	93-65-2	80	U	80	270	1
10401	2,4,5-T	93-76-5	0.088	U	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL133 SDG#: DE040-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	1.4	U	1.4	3.6	20
01363	Alpha BHC	319-84-6	0.73	U	0.73	3.6	20
01363	Beta BHC	319-85-7	1.3	U	1.3	3.6	20
01363	Gamma BHC - Lindane	58-89-9	0.73	U	0.73	3.6	20
01363	Chlordane	57-74-9	660		86	360	100
01363	p,p-DDD	72-54-8	44	U	44	44	100
01363	p,p-DDE	72-55-9	350		35	180	500
01363	p,p-DDT	50-29-3	340		35	180	500
01363	Delta BHC	319-86-8	0.77	U	0.77	3.6	20
01363	Dieldrin	60-57-1	12	U	12	12	20
01363	Endosulfan I	959-98-8	0.94	U	0.94	3.6	20
01363	Endosulfan II	33213-65-9	1.4	U	1.4	7.3	20
01363	Endosulfan Sulfate	1031-07-8	4.1	U	4.1	7.3	20
01363	Endrin	72-20-8	1.4	U	1.4	7.3	20
01363	Endrin Aldehyde	7421-93-4	1.4	U	1.4	7.3	20
01363	Endrin Ketone	53494-70-5	1.4	U	1.4	7.3	20
01363	Heptachlor	76-44-8	2.9	U	2.9	3.6	20
01363	Heptachlor Epoxide	1024-57-3	0.73	U	0.73	3.6	20
01363	Methoxychlor	72-43-5	7.3	U	7.3	36	20
01363	Mirex	2385-85-5	1.4	U	1.4	7.3	20
01363	Toxaphene	8001-35-2	47	U	47	140	20

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of technical chlordane, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: endosulfan sulfate.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	5.4	U	5.4	18	5
10225	Aroclor 5442	12642-23-8	5.4	U	5.4	18	5
10225	Aroclor 5460	11126-42-4	5.4	U	5.4	18	5
10225	PCB-1016	12674-11-2	1.8	U	1.8	9.1	5
10225	PCB-1221	11104-28-2	2.7	U	2.7	9.1	5
10225	PCB-1232	11141-16-5	2.8	U	2.8	9.1	5
10225	PCB-1242	53469-21-9	2.7	U	2.7	9.1	5
10225	PCB-1248	12672-29-6	1.8	U	1.8	9.1	5
10225	PCB-1254	11097-69-1	1.8	U	1.8	9.1	5

*=This limit was used in the evaluation of the final result

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL133 SDG#: DE040-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	PCB-1260	11096-82-5	1.8	U	1.8	9.1	5
10225	PCB-1262	37324-23-5	1.8	U	1.8	9.1	5
10225	PCB-1268	11100-14-4	1.8	U	1.8	9.1	5
	Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,000		5.34	21.2	1
07914	Boron	7440-42-8	5.69		0.945	5.31	1
01650	Calcium	7440-70-2	3,070		6.51	21.2	1
01654	Iron	7439-89-6	18,700		5.00	21.2	1
01656	Lithium	7439-93-2	15.8		0.23	2.1	1
01657	Magnesium	7439-95-4	3,560		2.70	10.6	1
06958	Manganese	7439-96-5	211		0.0829	0.531	1
10145	Phosphorus	7723-14-0	412		0.595	10.6	1
01662	Potassium	7440-09-7	2,550		19.1	53.1	1
01667	Sodium	7440-23-5	121		39.6	106	1
07968	Strontium	7440-24-6	20.4		0.0659	0.531	1
06969	Tin	7440-31-5	2.24	J	1.06	10.6	1
06970	Titanium	7440-32-6	1,090		0.404	1.06	1
10146	Zirconium	7440-67-7	1.92	J	0.892	5.31	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.141	J	0.0631	0.210	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	2.81		0.0631	0.421	2
06126	Barium	7440-39-3	58.2		0.114	0.421	2
06127	Beryllium	7440-41-7	0.350		0.0168	0.105	2
06128	Cadmium	7440-43-9	0.140		0.0379	0.105	2
06131	Chromium	7440-47-3	14.1		0.126	0.421	2
06132	Cobalt	7440-48-4	3.76		0.0210	0.105	2
06133	Copper	7440-50-8	6.61		0.0694	0.421	2
06135	Lead	7439-92-1	9.98		0.0109	0.210	2
06138	Molybdenum	7439-98-7	0.419		0.0526	0.105	2
06139	Nickel	7440-02-0	11.6		0.105	0.421	2
06141	Selenium	7782-49-2	0.125	J	0.0421	0.421	2
06142	Silver	7440-22-4	0.0610	J	0.0126	0.105	2
06145	Thallium	7440-28-0	0.147		0.0316	0.105	2
06148	Vanadium	7440-62-2	30.1		0.0231	0.105	2
06149	Zinc	7440-66-6	91.5		0.589	3.16	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0029	U	0.0029	0.102	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.0	J	0.86	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL133 SDG#: DE040-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 314.0**		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7	U	9.7	32.2	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	1.1		0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	430		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.25		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	6.8		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 14:26	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 09:49	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 12:58	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 02:19	Jamie L Brillhart	20
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/16/2011 21:15	Jamie L Brillhart	100
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/20/2011 22:28	Jamie L Brillhart	500
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 06:38	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL133 SDG#: DE040-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 13:54	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 13:54	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 13:54	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 13:54	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 13:54	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 13:54	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:01	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 12:42	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 12:42	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 12:42	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 12:42	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 05:55	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/11/2011 23:22	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 03:13	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 15:28	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166075
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL133 SDG#: DE040-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166076
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL131 SDG#: DE040-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	70	U	70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	35	J	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	70	U	70	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166076
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL131 SDG#: DE040-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.70	U	0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.70	U	0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.95	J	0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.70	U	0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.70	U	0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19	1
10138	Chrysene	218-01-9	0.84	J	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluoranthene	206-44-0	0.70	U	0.70	1.8	1
10138	Fluorene	86-73-7	0.70	U	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	U	0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.70	U	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.70	U	0.70	1.8	1
10138	Naphthalene	91-20-3	0.70	U	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	0.70	U	0.70	1.8	1
10138	Pyrene	129-00-0	0.70	U	0.70	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.5	U	1.5	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5	1
10401	2,4-DB	94-82-6	8.6	U	8.6	8.6	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8	1
10401	MCPA	94-74-6	500		80	260	1
10401	MCPP (Mecoprop)	93-65-2	190	U	190	260	1
10401	2,4,5-T	93-76-5	0.086	U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166076
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL131 SDG#: DE040-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.17	1
01363	Beta BHC	319-85-7	0.063	U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.17	1
01363	Chlordane	57-74-9	0.84	U	0.84	3.6	1
01363	p,p-DDD	72-54-8	0.16	U	0.16	0.36	1
01363	p,p-DDE	72-55-9	0.14	U	0.14	0.36	1
01363	p,p-DDT	50-29-3	0.54	U	0.54	0.54	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.17	1
01363	Dieldrin	60-57-1	3.9		0.35	1.8	5
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069	U	0.069	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.069	U	0.069	0.36	1
01363	Endrin	72-20-8	0.069	U	0.069	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.15	U	0.15	0.36	1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.36	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.036	U	0.036	0.17	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.7	1
01363	Mirex	2385-85-5	0.44	U	0.44	0.44	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	1.3	J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	3.5		0.35	1.8	1
10225	PCB-1260	11096-82-5	2.7		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166076
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL131 SDG#: DE040-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,400		5.03	20.0	1
07914	Boron	7440-42-8	6.67		0.890	5.00	1
01650	Calcium	7440-70-2	3,180		6.13	20.0	1
01654	Iron	7439-89-6	22,500		4.71	20.0	1
01656	Lithium	7439-93-2	20.8		0.22	2.0	1
01657	Magnesium	7439-95-4	4,620		2.54	10.0	1
06958	Manganese	7439-96-5	331		0.0780	0.500	1
10145	Phosphorus	7723-14-0	422		0.560	10.0	1
01662	Potassium	7440-09-7	3,720		18.0	50.0	1
01667	Sodium	7440-23-5	125		37.3	100	1
07968	Strontium	7440-24-6	20.3		0.0620	0.500	1
06969	Tin	7440-31-5	2.49	J	1.00	10.0	1
06970	Titanium	7440-32-6	1,430		0.380	1.00	1
10146	Zirconium	7440-67-7	3.08	J	0.840	5.00	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0800	J	0.0630	0.210	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.13		0.0630	0.420	2
06126	Barium	7440-39-3	113		0.113	0.420	2
06127	Beryllium	7440-41-7	0.552		0.0168	0.105	2
06128	Cadmium	7440-43-9	0.316		0.0378	0.105	2
06131	Chromium	7440-47-3	26.1		0.126	0.420	2
06132	Cobalt	7440-48-4	6.36		0.0210	0.105	2
06133	Copper	7440-50-8	10.4		0.0693	0.420	2
06135	Lead	7439-92-1	18.9		0.0109	0.210	2
06138	Molybdenum	7439-98-7	0.536		0.0525	0.105	2
06139	Nickel	7440-02-0	16.6		0.105	0.420	2
06141	Selenium	7782-49-2	0.128	J	0.0420	0.420	2
06142	Silver	7440-22-4	0.0671	J	0.0126	0.105	2
06145	Thallium	7440-28-0	0.265		0.0315	0.105	2
06148	Vanadium	7440-62-2	41.0		0.0231	0.105	2
06149	Zinc	7440-66-6	103		0.588	3.15	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0421	J	0.0028	0.0984	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.9		0.84	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.5	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	1.1		0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166076
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL131 SDG#: DE040-03

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	449	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.05	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	4.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 15:00	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 10:22	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 13:25	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 03:01	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/20/2011 22:14	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 06:57	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 16:27	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:04	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:04	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:04	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166076
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL131 SDG#: DE040-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:04	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:04	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:04	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:12	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:03	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/31/2010 07:12	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:03	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:03	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:03	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 05:56	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/11/2011 23:36	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 03:37	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 15:52	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166077
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL135 SDG#: DE040-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	560	1
04688	Anthracene	120-12-7	21	J	19	190	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzo(a)anthracene	56-55-3	85	J	19	190	1
04688	Benzo(a)pyrene	50-32-8	73	J	19	190	1
04688	Benzo(b)fluoranthene	205-99-2	92	J	19	190	1
04688	Benzo(g,h,i)perylene	191-24-2	46	J	19	190	1
04688	Benzo(k)fluoranthene	207-08-9	44	J	19	190	1
04688	Benzoic acid	65-85-0	490	J	190	560	1
04688	Benzyl alcohol	100-51-6	190	U	190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190	1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190	1
04688	4-Chloroaniline	106-47-8	74	U	74	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190	1
04688	Chrysene	218-01-9	110	J	19	190	1
04688	Dibenzofuran	132-64-9	50	J	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	Diethylphthalate	84-66-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190	1
04688	Dimethylphthalate	131-11-3	19	U	19	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560	1
04688	2,4-Dinitrophenol	51-28-5	740	U	740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	300	J	19	370	1
04688	Fluoranthene	206-44-0	150	J	19	190	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	74	U	74	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	36	J	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	1-Methylnaphthalene	90-12-0	71	J	19	190	1
04688	2-Methylnaphthalene	91-57-6	67	J	19	190	1
04688	2-Methylphenol	95-48-7	37	U	37	190	1
04688	4-Methylphenol	106-44-5	37	U	37	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166077
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL135 SDG#: DE040-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	37	U	37	190	1
04688	4-Nitroaniline	100-01-6	74	U	74	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	19	U	19	190	1
04688	Pentachlorophenol	87-86-5	190	U	190	560	1
04688	Phenanthrene	85-01-8	200		19	190	1
04688	Phenol	108-95-2	20	J	19	190	1
04688	Pyrene	129-00-0	170	J	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.7	U	3.7	9.3	5
10138	Acenaphthylene	208-96-8	1.9	J	1.9	9.3	5
10138	Dibenz(a,h)anthracene	53-70-3	4.6	J	3.7	9.3	5
10138	Fluorene	86-73-7	3.7	U	3.7	9.3	5
10138	Naphthalene	91-20-3	49		3.7	9.3	5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U	3.7	9.3	5
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	2.3	U	2.3	4.0	1
10401	Dalapon	75-99-0	4.9	U	4.9	10	1
10401	2,4-DB	94-82-6	27	U	27	27	1
10401	Dicamba	1918-00-9	0.60	J	0.44	1.3	1
10401	Dinoseb	88-85-7	0.89	U	0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U	0.89	1.9	1
10401	MCPA	94-74-6	84	U	84	280	1
10401	MCPP (Mecoprop)	93-65-2	83	U	83	280	1
10401	2,4,5-T	93-76-5	0.30	U	0.30	0.30	1
10401	2,4,5-TP	93-72-1	0.083	U	0.083	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166077
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL135 SDG#: DE040-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	Despite numerous cleanup methods, our usual reporting limits were not attained.						
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.3	U	2.3	5.6	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.73	U	0.73	1.8	10
01363	Alpha BHC	319-84-6	0.38	U	0.38	1.8	10
01363	Beta BHC	319-85-7	0.67	U	0.67	1.8	10
01363	Gamma BHC - Lindane	58-89-9	0.87	J	0.38	1.8	10
01363	Chlordane	57-74-9	8.9	U	8.9	38	10
01363	p,p-DDD	72-54-8	6.2		0.73	3.8	10
01363	p,p-DDE	72-55-9	26		0.73	3.8	10
01363	p,p-DDT	50-29-3	14		0.73	3.8	10
01363	Delta BHC	319-86-8	0.40	U	0.40	1.8	10
01363	Dieldrin	60-57-1	0.73	U	0.73	3.8	10
01363	Endosulfan I	959-98-8	0.49	U	0.49	1.8	10
01363	Endosulfan II	33213-65-9	0.73	U	0.73	3.8	10
01363	Endosulfan Sulfate	1031-07-8	0.73	U	0.73	3.8	10
01363	Endrin	72-20-8	0.73	U	0.73	3.8	10
01363	Endrin Aldehyde	7421-93-4	5.2	U	5.2	5.2	10
01363	Endrin Ketone	53494-70-5	0.73	U	0.73	3.8	10
01363	Heptachlor	76-44-8	0.67	U	0.67	1.8	10
01363	Heptachlor Epoxide	1024-57-3	1.0	U	1.0	1.8	10
01363	Methoxychlor	72-43-5	3.8	U	3.8	18	10
01363	Mirex	2385-85-5	0.73	U	0.73	3.8	10
01363	Toxaphene	8001-35-2	24	U	24	73	10
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.						
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	11	U	11	37	10
10225	Aroclor 5442	12642-23-8	11	U	11	37	10
10225	Aroclor 5460	11126-42-4	17	J	11	37	10
10225	PCB-1016	12674-11-2	3.7	U	3.7	19	10
10225	PCB-1221	11104-28-2	5.6	U	5.6	19	10
10225	PCB-1232	11141-16-5	5.8	U	5.8	19	10
10225	PCB-1242	53469-21-9	5.6	U	5.6	19	10
10225	PCB-1248	12672-29-6	3.7	U	3.7	19	10
10225	PCB-1254	11097-69-1	20		3.7	19	10
10225	PCB-1260	11096-82-5	9.7	J	3.7	19	10
10225	PCB-1262	37324-23-5	3.7	U	3.7	19	10
10225	PCB-1268	11100-14-4	3.7	U	3.7	19	10

*=This limit was used in the evaluation of the final result

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166077
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL135 SDG#: DE040-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,000		5.43	21.6	1
07914	Boron	7440-42-8	5.53		0.960	5.39	1
01650	Calcium	7440-70-2	2,960		6.61	21.6	1
01654	Iron	7439-89-6	20,800		5.08	21.6	1
01656	Lithium	7439-93-2	21.3		0.24	2.2	1
01657	Magnesium	7439-95-4	4,500		2.74	10.8	1
06958	Manganese	7439-96-5	250		0.0841	0.539	1
10145	Phosphorus	7723-14-0	414		0.604	10.8	1
01662	Potassium	7440-09-7	3,280		19.4	53.9	1
01667	Sodium	7440-23-5	110		40.2	108	1
07968	Strontium	7440-24-6	13.8		0.0669	0.539	1
06969	Tin	7440-31-5	2.56	J	1.08	10.8	1
06970	Titanium	7440-32-6	1,320		0.410	1.08	1
10146	Zirconium	7440-67-7	1.84	J	0.906	5.39	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.207	J	0.0660	0.220	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.00		0.0660	0.440	2
06126	Barium	7440-39-3	66.1		0.119	0.440	2
06127	Beryllium	7440-41-7	0.455		0.0176	0.110	2
06128	Cadmium	7440-43-9	0.296		0.0396	0.110	2
06131	Chromium	7440-47-3	16.9		0.132	0.440	2
06132	Cobalt	7440-48-4	4.26		0.0220	0.110	2
06133	Copper	7440-50-8	8.59		0.0726	0.440	2
06135	Lead	7439-92-1	80.9		0.0114	0.220	2
06138	Molybdenum	7439-98-7	0.507		0.0550	0.110	2
06139	Nickel	7440-02-0	11.7		0.110	0.440	2
06141	Selenium	7782-49-2	0.0906	J	0.0440	0.440	2
06142	Silver	7440-22-4	0.147		0.0132	0.110	2
06145	Thallium	7440-28-0	0.208		0.0330	0.110	2
06148	Vanadium	7440-62-2	29.7		0.0242	0.110	2
06149	Zinc	7440-66-6	105		0.616	3.30	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.186		0.0029	0.103	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.7		0.89	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10	U	10	33.3	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	2.0		0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166077
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL135 SDG#: DE040-04

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	452	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	6.33	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	10	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 15:35	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 10:54	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 13:52	Sarah M Snyder	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103500020A	12/21/2010 18:22	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 03:29	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 07:15	Lindsey K Lafferty	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 16:45	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103500020A	12/17/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:07	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166077
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL135 SDG#: DE040-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:07	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:07	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:07	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:07	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:07	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:16	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/31/2010 07:14	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:13	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 05:57	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/11/2011 23:50	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 04:01	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 16:08	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166078
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL134 SDG#: DE040-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	70	U	70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	J	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	70	U	70	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166078
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL134 SDG#: DE040-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.81	J	0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.80	J	0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	1.7	J	0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.97	J	0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.70	U	0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19	1
10138	Chrysene	218-01-9	1.7	J	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluoranthene	206-44-0	1.2	J	0.70	1.8	1
10138	Fluorene	86-73-7	0.70	U	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	U	0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	1.0	J	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	1.1	J	0.70	1.8	1
10138	Naphthalene	91-20-3	0.70	U	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	3.4		0.70	1.8	1
10138	Pyrene	129-00-0	1.2	J	0.70	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5	1
10401	2,4-DB	94-82-6	0.65	U	0.65	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8	1
10401	MCPA	94-74-6	170	J	80	260	1
10401	MCPP (Mecoprop)	93-65-2	200	J	79	260	1
10401	2,4,5-T	93-76-5	0.086	U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.073	J	0.036	0.17	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166078
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL134 SDG#: DE040-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Beta BHC	319-85-7	0.22	U	0.22	0.22	1
01363	Gamma BHC - Lindane	58-89-9	0.075	U	0.075	0.17	1
01363	Chlordane	57-74-9	0.84	U	0.84	3.6	1
01363	p,p-DDD	72-54-8	2.0	U	2.0	2.0	1
01363	p,p-DDE	72-55-9	1.3	U	1.3	1.3	1
01363	p,p-DDT	50-29-3	4.2		0.35	1.8	5
01363	Delta BHC	319-86-8	0.054	J	0.038	0.17	1
01363	Dieldrin	60-57-1	0.35	U	0.35	0.36	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.18	U	0.18	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.40	U	0.40	0.40	1
01363	Endrin	72-20-8	0.069	U	0.069	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.62	U	0.62	0.62	1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.36	1
01363	Heptachlor	76-44-8	0.15	U	0.15	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.14	U	0.14	0.17	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.7	1
01363	Mirex	2385-85-5	0.069	U	0.069	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.1	U	2.1	6.9	2
10225	Aroclor 5442	12642-23-8	2.1	U	2.1	6.9	2
10225	Aroclor 5460	11126-42-4	7.1		2.1	6.9	2
10225	PCB-1016	12674-11-2	0.69	U	0.69	3.6	2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.6	2
10225	PCB-1232	11141-16-5	1.1	U	1.1	3.6	2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.6	2
10225	PCB-1248	12672-29-6	0.69	U	0.69	3.6	2
10225	PCB-1254	11097-69-1	17		0.69	3.6	2
10225	PCB-1260	11096-82-5	9.4		0.69	3.6	2
10225	PCB-1262	37324-23-5	0.69	U	0.69	3.6	2
10225	PCB-1268	11100-14-4	0.69	U	0.69	3.6	2

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

*=This limit was used in the evaluation of the final result

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166078
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL134 SDG#: DE040-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,500		5.19	20.6	1
07914	Boron	7440-42-8	4.96	J	0.918	5.15	1
01650	Calcium	7440-70-2	2,490		6.32	20.6	1
01654	Iron	7439-89-6	19,300		4.86	20.6	1
01656	Lithium	7439-93-2	19.8		0.23	2.1	1
01657	Magnesium	7439-95-4	3,630		2.62	10.3	1
06958	Manganese	7439-96-5	213		0.0804	0.515	1
10145	Phosphorus	7723-14-0	330		0.577	10.3	1
01662	Potassium	7440-09-7	2,550		18.6	51.5	1
01667	Sodium	7440-23-5	103		38.5	103	1
07968	Strontium	7440-24-6	15.6		0.0639	0.515	1
06969	Tin	7440-31-5	2.32	J	1.03	10.3	1
06970	Titanium	7440-32-6	1,130		0.392	1.03	1
10146	Zirconium	7440-67-7	1.38	J	0.866	5.15	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.118	J	0.0613	0.204	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.77		0.0613	0.408	2
06126	Barium	7440-39-3	72.6		0.110	0.408	2
06127	Beryllium	7440-41-7	0.556		0.0163	0.102	2
06128	Cadmium	7440-43-9	0.180		0.0368	0.102	2
06131	Chromium	7440-47-3	28.1		0.123	0.408	2
06132	Cobalt	7440-48-4	5.29		0.0204	0.102	2
06133	Copper	7440-50-8	8.60		0.0674	0.408	2
06135	Lead	7439-92-1	13.8		0.0106	0.204	2
06138	Molybdenum	7439-98-7	0.575		0.0510	0.102	2
06139	Nickel	7440-02-0	17.6		0.102	0.408	2
06141	Selenium	7782-49-2	0.101	J	0.0408	0.408	2
06142	Silver	7440-22-4	0.123		0.0123	0.102	2
06145	Thallium	7440-28-0	0.202		0.0306	0.102	2
06148	Vanadium	7440-62-2	37.0		0.0225	0.102	2
06149	Zinc	7440-66-6	66.3		0.572	3.06	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0181	J	0.0029	0.0999	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.1		0.84	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.5	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.50	J	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166078
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL134 SDG#: DE040-05

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	452	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	6.74	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	4.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 16:10	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 11:27	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 14:20	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 03:43	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/16/2011 21:29	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 07:34	Lindsey K Lafferty	2
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 17:04	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:11	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:11	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:11	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166078
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL134 SDG#: DE040-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:11	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:11	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:11	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:20	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:01	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/12/2011 00:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 04:25	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 16:16	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166079
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD021 SDG#: DE040-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	70	U	70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	J	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	70	U	70	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166079
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD021 SDG#: DE040-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.70	U	0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.70	U	0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.70	U	0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.70	U	0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.70	U	0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19	1
10138	Chrysene	218-01-9	0.62	J	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluoranthene	206-44-0	0.70	U	0.70	1.8	1
10138	Fluorene	86-73-7	0.70	U	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	U	0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.70	U	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.70	U	0.70	1.8	1
10138	Naphthalene	91-20-3	0.70	U	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	0.70	U	0.70	1.8	1
10138	Pyrene	129-00-0	0.70	U	0.70	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5	1
10401	2,4-DB	94-82-6	4.7	U	4.7	4.7	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8	1
10401	MCPA	94-74-6	280	U	280	280	1
10401	MCPP (Mecoprop)	93-65-2	370		79	260	1
10401	2,4,5-T	93-76-5	0.18	U	0.18	0.18	1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166079
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD021 SDG#: DE040-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.070	U	0.070	0.17	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.17	1
01363	Beta BHC	319-85-7	0.16	U	0.16	0.17	1
01363	Gamma BHC - Lindane	58-89-9	1.3		0.036	0.17	1
01363	Chlordane	57-74-9	0.84	U	0.84	3.6	1
01363	p,p-DDD	72-54-8	0.070	U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.18	J	0.070	0.36	1
01363	p,p-DDT	50-29-3	0.62		0.070	0.36	1
01363	Delta BHC	319-86-8	0.81		0.038	0.17	1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070	U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.036	U	0.036	0.17	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.7	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	21	U	21	70	20
10225	Aroclor 5442	12642-23-8	21	U	21	70	20
10225	Aroclor 5460	11126-42-4	21	U	21	70	20
10225	PCB-1016	12674-11-2	7.0	U	7.0	36	20
10225	PCB-1221	11104-28-2	11	U	11	36	20
10225	PCB-1232	11141-16-5	11	U	11	36	20
10225	PCB-1242	53469-21-9	11	U	11	36	20
10225	PCB-1248	12672-29-6	7.0	U	7.0	36	20
10225	PCB-1254	11097-69-1	7.0	U	7.0	36	20
10225	PCB-1260	11096-82-5	7.0	U	7.0	36	20
10225	PCB-1262	37324-23-5	7.0	U	7.0	36	20
10225	PCB-1268	11100-14-4	7.0	U	7.0	36	20

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166079
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD021 SDG#: DE040-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	9,560		5.20	20.7	1
07914	Boron	7440-42-8	3.56	J	0.919	5.17	1
01650	Calcium	7440-70-2	1,820		6.33	20.7	1
01654	Iron	7439-89-6	16,900		4.87	20.7	1
01656	Lithium	7439-93-2	19.8		0.23	2.1	1
01657	Magnesium	7439-95-4	3,980		2.62	10.3	1
06958	Manganese	7439-96-5	239		0.0806	0.517	1
10145	Phosphorus	7723-14-0	324		0.579	10.3	1
01662	Potassium	7440-09-7	2,920		18.6	51.7	1
01667	Sodium	7440-23-5	63.5	J	38.5	103	1
07968	Strontium	7440-24-6	7.16		0.0641	0.517	1
06969	Tin	7440-31-5	2.17	J	1.03	10.3	1
06970	Titanium	7440-32-6	1,130		0.393	1.03	1
10146	Zirconium	7440-67-7	0.868	U	0.868	5.17	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0608	U	0.0608	0.203	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	2.43		0.0608	0.405	2
06126	Barium	7440-39-3	62.3		0.109	0.405	2
06127	Beryllium	7440-41-7	0.274		0.0162	0.101	2
06128	Cadmium	7440-43-9	0.0800	J	0.0365	0.101	2
06131	Chromium	7440-47-3	12.5		0.122	0.405	2
06132	Cobalt	7440-48-4	3.62		0.0203	0.101	2
06133	Copper	7440-50-8	4.44		0.0669	0.405	2
06135	Lead	7439-92-1	5.31		0.0105	0.203	2
06138	Molybdenum	7439-98-7	0.222		0.0507	0.101	2
06139	Nickel	7440-02-0	6.99		0.101	0.405	2
06141	Selenium	7782-49-2	0.0924	J	0.0405	0.405	2
06142	Silver	7440-22-4	0.0170	J	0.0122	0.101	2
06145	Thallium	7440-28-0	0.156		0.0304	0.101	2
06148	Vanadium	7440-62-2	26.8		0.0223	0.101	2
06149	Zinc	7440-66-6	42.6		0.567	3.04	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0029	U	0.0029	0.101	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.84	U	0.84	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.6	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.21	U	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166079
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD021 SDG#: DE040-06

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	469	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	6.92	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.1	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 16:45	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 12:00	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 14:47	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 03:58	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 17:22	Lindsey K Lafferty	20
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:14	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:14	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:14	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166079
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD021 SDG#: DE040-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:14	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:14	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:14	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:24	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:19	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:19	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:19	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:02	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/12/2011 00:19	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 04:49	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 16:32	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166080
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD018 SDG#: DE040-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzoic acid	65-85-0	180	U	180	550	1
04688	Benzyl alcohol	100-51-6	180	U	180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180	1
04688	4-Chloroaniline	106-47-8	74	U	74	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
04688	2,4-Dinitrophenol	51-28-5	740	U	740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	24	J	18	370	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	74	U	74	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	37	U	37	180	1
04688	4-Methylphenol	106-44-5	37	U	37	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	37	U	37	180	1
04688	4-Nitroaniline	100-01-6	74	U	74	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	550	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166080
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD018 SDG#: DE040-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.74	U	0.74	1.8	1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.8	1
10138	Anthracene	120-12-7	0.65	J	0.37	1.8	1
10138	Benzo(a)anthracene	56-55-3	2.0		0.74	1.8	1
10138	Benzo(a)pyrene	50-32-8	2.2		0.74	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	4.7		0.74	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	1.2	J	0.74	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	2.0		0.74	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.7	U	6.7	20	1
10138	Di-n-butylphthalate	84-74-2	6.7	U	6.7	20	1
10138	Chrysene	218-01-9	4.1		0.37	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.74	U	0.74	1.8	1
10138	Diethylphthalate	84-66-2	6.7	U	6.7	20	1
10138	Dimethylphthalate	131-11-3	6.7	U	6.7	20	1
10138	Fluoranthene	206-44-0	8.0		0.74	1.8	1
10138	Fluorene	86-73-7	0.74	U	0.74	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.1	J	0.74	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.74	U	0.74	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.74	U	0.74	1.8	1
10138	Naphthalene	91-20-3	1.5	J	0.74	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.74	U	0.74	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.7	U	6.7	20	1
10138	Phenanthrene	85-01-8	4.7		0.74	1.8	1
10138	Pyrene	129-00-0	5.4		0.74	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0	1
10401	Dalapon	75-99-0	4.9	U	4.9	10	1
10401	2,4-DB	94-82-6	12	U	12	12	1
10401	Dicamba	1918-00-9	0.44	U	0.44	1.3	1
10401	Dinoseb	88-85-7	0.89	U	0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U	0.89	1.9	1
10401	MCPA	94-74-6	760		84	280	1
10401	MCPP (Mecoprop)	93-65-2	200	J	83	280	1
10401	2,4,5-T	93-76-5	0.091	U	0.091	0.19	1
10401	2,4,5-TP	93-72-1	0.23		0.083	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166080
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD018 SDG#: DE040-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.073	U	0.073	0.18	1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.18	1
01363	Beta BHC	319-85-7	0.067	U	0.067	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.038	U	0.038	0.18	1
01363	Chlordane	57-74-9	0.89	U	0.89	3.8	1
01363	p,p-DDD	72-54-8	0.073	U	0.073	0.38	1
01363	p,p-DDE	72-55-9	0.20	U	0.20	0.38	1
01363	p,p-DDT	50-29-3	0.28	U	0.28	0.38	1
01363	Delta BHC	319-86-8	0.078	J	0.040	0.18	1
01363	Dieldrin	60-57-1	0.073	U	0.073	0.38	1
01363	Endosulfan I	959-98-8	0.049	U	0.049	0.18	1
01363	Endosulfan II	33213-65-9	0.073	U	0.073	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.073	U	0.073	0.38	1
01363	Endrin	72-20-8	0.073	U	0.073	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.073	U	0.073	0.38	1
01363	Endrin Ketone	53494-70-5	0.073	U	0.073	0.38	1
01363	Heptachlor	76-44-8	0.12	J	0.067	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.13	U	0.13	0.18	1
01363	Methoxychlor	72-43-5	0.38	U	0.38	1.8	1
01363	Mirex	2385-85-5	0.073	U	0.073	0.38	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.3	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	3.7		1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9	1
10225	PCB-1232	11141-16-5	0.58	U	0.58	1.9	1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9	1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9	1
10225	PCB-1254	11097-69-1	1.1	J	0.37	1.9	1
10225	PCB-1260	11096-82-5	1.1	J	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9	1

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166080
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD018 SDG#: DE040-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,800		5.53	22.0	1
07914	Boron	7440-42-8	5.74		0.978	5.49	1
01650	Calcium	7440-70-2	3,310		6.74	22.0	1
01654	Iron	7439-89-6	20,100		5.18	22.0	1
01656	Lithium	7439-93-2	27.1		0.24	2.2	1
01657	Magnesium	7439-95-4	4,410		2.79	11.0	1
06958	Manganese	7439-96-5	306		0.0857	0.549	1
10145	Phosphorus	7723-14-0	394		0.615	11.0	1
01662	Potassium	7440-09-7	3,880		19.8	54.9	1
01667	Sodium	7440-23-5	71.2	J	41.0	110	1
07968	Strontium	7440-24-6	14.8		0.0681	0.549	1
06969	Tin	7440-31-5	2.55	J	1.10	11.0	1
06970	Titanium	7440-32-6	1,260		0.418	1.10	1
10146	Zirconium	7440-67-7	1.38	J	0.923	5.49	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0659	U	0.0659	0.220	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.12		0.0659	0.440	2
06126	Barium	7440-39-3	80.1		0.119	0.440	2
06127	Beryllium	7440-41-7	0.486		0.0176	0.110	2
06128	Cadmium	7440-43-9	0.166		0.0396	0.110	2
06131	Chromium	7440-47-3	15.9		0.132	0.440	2
06132	Cobalt	7440-48-4	4.39		0.0220	0.110	2
06133	Copper	7440-50-8	6.16		0.0725	0.440	2
06135	Lead	7439-92-1	7.20		0.0114	0.220	2
06138	Molybdenum	7439-98-7	0.468		0.0549	0.110	2
06139	Nickel	7440-02-0	9.70		0.110	0.440	2
06141	Selenium	7782-49-2	0.155	J	0.0440	0.440	2
06142	Silver	7440-22-4	0.0255	J	0.0132	0.110	2
06145	Thallium	7440-28-0	0.234		0.0330	0.110	2
06148	Vanadium	7440-62-2	28.6		0.0242	0.110	2
06149	Zinc	7440-66-6	54.9		0.615	3.30	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0097	J	0.0031	0.108	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3		0.89	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10	U	10	33.3	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.34	J	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166080
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD018 SDG#: DE040-07

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	459	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.25	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	9.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 17:19	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 12:32	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 20:35	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 04:26	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 08:11	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 17:41	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:18	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:18	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:18	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166080
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD018 SDG#: DE040-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:18	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:18	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:18	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:28	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:22	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:22	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:22	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:22	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:03	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/12/2011 00:33	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 05:13	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 16:48	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166082
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD016 SDG#: DE040-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	560	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzoic acid	65-85-0	190	U	190	560	1
04688	Benzyl alcohol	100-51-6	190	U	190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190	1
04688	4-Chloroaniline	106-47-8	74	U	74	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560	1
04688	2,4-Dinitrophenol	51-28-5	740	U	740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	28	J	19	370	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	74	U	74	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	37	U	37	190	1
04688	4-Methylphenol	106-44-5	37	U	37	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	37	U	37	190	1
04688	4-Nitroaniline	100-01-6	74	U	74	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	560	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166082
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD016 SDG#: DE040-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.74	U	0.74	1.9	1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.9	1
10138	Anthracene	120-12-7	0.37	U	0.37	1.9	1
10138	Benzo(a)anthracene	56-55-3	3.0		0.74	1.9	1
10138	Benzo(a)pyrene	50-32-8	5.6		0.74	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	12		0.74	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	3.1		0.74	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	5.1		0.74	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.7	U	6.7	20	1
10138	Di-n-butylphthalate	84-74-2	6.7	U	6.7	20	1
10138	Chrysene	218-01-9	9.0		0.37	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.74	U	0.74	1.9	1
10138	Diethylphthalate	84-66-2	6.7	U	6.7	20	1
10138	Dimethylphthalate	131-11-3	6.7	U	6.7	20	1
10138	Fluoranthene	206-44-0	16		0.74	1.9	1
10138	Fluorene	86-73-7	0.74	U	0.74	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	2.9		0.74	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.74	U	0.74	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.74	U	0.74	1.9	1
10138	Naphthalene	91-20-3	0.74	U	0.74	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.74	U	0.74	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.7	U	6.7	20	1
10138	Phenanthrene	85-01-8	5.5		0.74	1.9	1
10138	Pyrene	129-00-0	12		0.74	1.9	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0	1
10401	Dalapon	75-99-0	4.9	U	4.9	10	1
10401	2,4-DB	94-82-6	3.2	U	3.2	3.2	1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.3	1
10401	Dinoseb	88-85-7	0.89	U	0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U	0.89	1.9	1
10401	MCPA	94-74-6	430		85	280	1
10401	MCPP (Mecoprop)	93-65-2	430		84	280	1
10401	2,4,5-T	93-76-5	0.092	U	0.092	0.19	1
10401	2,4,5-TP	93-72-1	0.20		0.084	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166082
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD016 SDG#: DE040-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	cases, the reporting limits have been raised. The following compound was affected: 2,4-DB.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.074	U	0.074	0.19	1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.19	1
01363	Beta BHC	319-85-7	0.067	U	0.067	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.038	U	0.038	0.19	1
01363	Chlordane	57-74-9	1.5	U	1.5	3.8	1
01363	p,p-DDD	72-54-8	0.28	U	0.28	0.38	1
01363	p,p-DDE	72-55-9	0.38	U	0.38	0.38	1
01363	p,p-DDT	50-29-3	0.99	U	0.99	0.99	1
01363	Delta BHC	319-86-8	0.040	U	0.040	0.19	1
01363	Dieldrin	60-57-1	0.088	U	0.088	0.38	1
01363	Endosulfan I	959-98-8	0.049	U	0.049	0.19	1
01363	Endosulfan II	33213-65-9	0.074	U	0.074	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.074	U	0.074	0.38	1
01363	Endrin	72-20-8	0.074	U	0.074	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.15	U	0.15	0.38	1
01363	Endrin Ketone	53494-70-5	0.074	U	0.074	0.38	1
01363	Heptachlor	76-44-8	0.067	U	0.067	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.038	U	0.038	0.19	1
01363	Methoxychlor	72-43-5	0.38	U	0.38	1.9	1
01363	Mirex	2385-85-5	1.0	U	1.0	1.0	1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.4	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.						
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	4.6		1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9	1
10225	PCB-1232	11141-16-5	0.58	U	0.58	1.9	1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9	1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9	1
10225	PCB-1254	11097-69-1	0.37	U	0.37	1.9	1
10225	PCB-1260	11096-82-5	4.0		0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9	1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,900		5.61	22.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166082
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD016 SDG#: DE040-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
07914	Boron	7440-42-8	4.30	J	0.993	5.58	1
01650	Calcium	7440-70-2	2,450		6.84	22.3	1
01654	Iron	7439-89-6	19,300		5.26	22.3	1
01656	Lithium	7439-93-2	22.0		0.25	2.2	1
01657	Magnesium	7439-95-4	4,220		2.83	11.2	1
06958	Manganese	7439-96-5	260		0.0871	0.558	1
10145	Phosphorus	7723-14-0	299		0.625	11.2	1
01662	Potassium	7440-09-7	2,780		20.1	55.8	1
01667	Sodium	7440-23-5	89.4	J	41.6	112	1
07968	Strontium	7440-24-6	14.0		0.0692	0.558	1
06969	Tin	7440-31-5	2.59	J	1.12	11.2	1
06970	Titanium	7440-32-6	1,270		0.424	1.12	1
10146	Zirconium	7440-67-7	1.30	J	0.938	5.58	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0657	U	0.0657	0.219	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.07		0.0657	0.438	2
06126	Barium	7440-39-3	69.7		0.118	0.438	2
06127	Beryllium	7440-41-7	0.468		0.0175	0.109	2
06128	Cadmium	7440-43-9	0.154		0.0394	0.109	2
06131	Chromium	7440-47-3	17.9		0.131	0.438	2
06132	Cobalt	7440-48-4	4.65		0.0219	0.109	2
06133	Copper	7440-50-8	6.70		0.0722	0.438	2
06135	Lead	7439-92-1	6.00		0.0114	0.219	2
06138	Molybdenum	7439-98-7	0.377		0.0547	0.109	2
06139	Nickel	7440-02-0	10.3		0.109	0.438	2
06141	Selenium	7782-49-2	0.0957	J	0.0438	0.438	2
06142	Silver	7440-22-4	0.0265	J	0.0131	0.109	2
06145	Thallium	7440-28-0	0.214		0.0328	0.109	2
06148	Vanadium	7440-62-2	32.7		0.0241	0.109	2
06149	Zinc	7440-66-6	62.4		0.613	3.28	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0469	J	0.0032	0.110	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0		0.89	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.0	U	10.0	33.5	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.81	J	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166082
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD016 SDG#: DE040-09

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	467	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.00	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	10.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 17:54	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 13:04	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 21:02	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 04:40	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 09:44	Lindsey K Lafferty	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 18:00	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:21	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:21	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:21	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166082
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD016 SDG#: DE040-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:21	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:21	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:21	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:31	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:25	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:25	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:25	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:25	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:04	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/12/2011 00:47	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 05:37	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 17:12	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166083
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL153 SDG#: DE040-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	580	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800	1
04688	Benzo(a)pyrene	50-32-8	19	J	19	190	1
04688	Benzoic acid	65-85-0	190	U	190	580	1
04688	Benzyl alcohol	100-51-6	190	U	190	580	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Di-n-butylphthalate	84-74-2	23	J	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190	1
04688	4-Chloroaniline	106-47-8	77	U	77	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580	1
04688	2,4-Dinitrophenol	51-28-5	770	U	770	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	51	J	19	380	1
04688	Fluoranthene	206-44-0	20	J	19	190	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	38	U	38	190	1
04688	4-Methylphenol	106-44-5	38	U	38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	38	U	38	190	1
04688	4-Nitroaniline	100-01-6	77	U	77	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	580	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166083
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL153 SDG#: DE040-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	580	1
04688	Phenol	108-95-2	19	U	19	190	1
04688	Pyrene	129-00-0	22	J	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.8	U	3.8	9.6	5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.6	5
10138	Anthracene	120-12-7	1.9	U	1.9	9.6	5
10138	Benzo(a)anthracene	56-55-3	6.1	J	3.8	9.6	5
10138	Benzo(b)fluoranthene	205-99-2	13		3.8	9.6	5
10138	Benzo(g,h,i)perylene	191-24-2	4.4	J	3.8	9.6	5
10138	Benzo(k)fluoranthene	207-08-9	3.8	U	3.8	9.6	5
10138	Butylbenzylphthalate	85-68-7	35	U	35	100	5
10138	Chrysene	218-01-9	11		1.9	9.6	5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U	3.8	9.6	5
10138	Diethylphthalate	84-66-2	35	U	35	100	5
10138	Dimethylphthalate	131-11-3	35	U	35	100	5
10138	Fluorene	86-73-7	3.8	U	3.8	9.6	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U	3.8	9.6	5
10138	1-Methylnaphthalene	90-12-0	5.0	J	3.8	9.6	5
10138	2-Methylnaphthalene	91-57-6	6.4	J	3.8	9.6	5
10138	Naphthalene	91-20-3	27		3.8	9.6	5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U	3.8	9.6	5
10138	Di-n-octylphthalate	117-84-0	35	U	35	100	5
10138	Phenanthrene	85-01-8	10		3.8	9.6	5
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1	1
10401	Dalapon	75-99-0	5.1	U	5.1	10	1
10401	2,4-DB	94-82-6	8.6	U	8.6	8.6	1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4	1
10401	Dinoseb	88-85-7	0.92	U	0.92	2.8	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U	0.92	2.0	1
10401	MCPA	94-74-6	300		88	290	1
10401	MCPP (Mecoprop)	93-65-2	180	U	180	180	1
10401	2,4,5-T	93-76-5	0.094	U	0.094	0.20	1
10401	2,4,5-TP	93-72-1	0.086	U	0.086	0.20	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166083
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL153 SDG#: DE040-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19	1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19	1
01363	Beta BHC	319-85-7	0.069	U	0.069	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19	1
01363	Chlordane	57-74-9	0.92	U	0.92	3.9	1
01363	p,p-DDD	72-54-8	0.23	U	0.23	0.39	1
01363	p,p-DDE	72-55-9	0.24	U	0.24	0.39	1
01363	p,p-DDT	50-29-3	0.88	U	0.88	0.88	1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19	1
01363	Dieldrin	60-57-1	0.16	U	0.16	0.39	1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19	1
01363	Endosulfan II	33213-65-9	0.12	U	0.12	0.39	1
01363	Endosulfan Sulfate	1031-07-8	0.10	U	0.10	0.39	1
01363	Endrin	72-20-8	0.076	U	0.076	0.39	1
01363	Endrin Aldehyde	7421-93-4	0.20	U	0.20	0.39	1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39	1
01363	Heptachlor	76-44-8	0.069	U	0.069	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.039	U	0.039	0.19	1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9	1
01363	Mirex	2385-85-5	0.076	U	0.076	0.39	1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.						
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.3	U	2.3	7.6	2
10225	Aroclor 5442	12642-23-8	2.3	U	2.3	7.6	2
10225	Aroclor 5460	11126-42-4	110		2.3	7.6	2
10225	PCB-1016	12674-11-2	0.76	U	0.76	3.9	2
10225	PCB-1221	11104-28-2	1.2	U	1.2	3.9	2
10225	PCB-1232	11141-16-5	1.2	U	1.2	3.9	2
10225	PCB-1242	53469-21-9	1.2	U	1.2	3.9	2
10225	PCB-1248	12672-29-6	0.76	U	0.76	3.9	2
10225	PCB-1254	11097-69-1	26		0.76	3.9	2
10225	PCB-1260	11096-82-5	38		0.76	3.9	2
10225	PCB-1262	37324-23-5	0.76	U	0.76	3.9	2
10225	PCB-1268	11100-14-4	0.76	U	0.76	3.9	2
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166083
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL153 SDG#: DE040-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,300		5.57	22.2	1
07914	Boron	7440-42-8	6.46		0.986	5.54	1
01650	Calcium	7440-70-2	3,630		6.79	22.2	1
01654	Iron	7439-89-6	21,400		5.22	22.2	1
01656	Lithium	7439-93-2	17.3		0.24	2.2	1
01657	Magnesium	7439-95-4	4,110		2.81	11.1	1
06958	Manganese	7439-96-5	274		0.0864	0.554	1
10145	Phosphorus	7723-14-0	336		0.620	11.1	1
01662	Potassium	7440-09-7	3,000		19.9	55.4	1
01667	Sodium	7440-23-5	121		41.3	111	1
07968	Strontium	7440-24-6	26.8		0.0687	0.554	1
06969	Tin	7440-31-5	2.54	J	1.11	11.1	1
06970	Titanium	7440-32-6	1,260		0.421	1.11	1
10146	Zirconium	7440-67-7	2.00	J	0.931	5.54	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.143	J	0.0678	0.226	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.42		0.0678	0.452	2
06126	Barium	7440-39-3	97.2		0.122	0.452	2
06127	Beryllium	7440-41-7	0.567		0.0181	0.113	2
06128	Cadmium	7440-43-9	0.296		0.0407	0.113	2
06131	Chromium	7440-47-3	25.1		0.136	0.452	2
06132	Cobalt	7440-48-4	6.13		0.0226	0.113	2
06133	Copper	7440-50-8	11.0		0.0745	0.452	2
06135	Lead	7439-92-1	32.4		0.0117	0.226	2
06138	Molybdenum	7439-98-7	0.509		0.0565	0.113	2
06139	Nickel	7440-02-0	16.0		0.113	0.452	2
06141	Selenium	7782-49-2	0.117	J	0.0452	0.452	2
06142	Silver	7440-22-4	0.108	J	0.0136	0.113	2
06145	Thallium	7440-28-0	0.232		0.0339	0.113	2
06148	Vanadium	7440-62-2	41.9		0.0248	0.113	2
06149	Zinc	7440-66-6	84.1		0.633	3.39	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0513	J	0.0032	0.111	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.2		0.92	1.2	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4	U	10.4	34.6	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	1.4		0.23	1.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166083
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL153 SDG#: DE040-10

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	501	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	6.84	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	13.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 18:28	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 13:38	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 21:30	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 06:19	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/24/2010 10:02	Lindsey K Lafferty	2
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 18:18	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:25	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:25	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:25	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166083
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL153 SDG#: DE040-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:25	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:25	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:25	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:35	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:28	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:28	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:28	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:28	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:05	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/12/2011 01:01	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 06:25	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 17:28	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102A	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402A	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL155 SDG#: DE040-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	170	U	170	520	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U	170	520	1
04688	Benzyl alcohol	100-51-6	170	U	170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U	17	170	1
04688	Carbazole	86-74-8	17	U	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	170	1
04688	4-Chloroaniline	106-47-8	70	U	70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U	17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U	17	170	1
04688	2-Chlorophenol	95-57-8	17	U	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	170	1
04688	Dibenzofuran	132-64-9	17	U	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U	100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U	17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U	170	520	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	31	J	17	350	1
04688	Hexachlorobenzene	118-74-1	17	U	17	170	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U	170	520	1
04688	Hexachloroethane	67-72-1	17	U	17	170	1
04688	Isophorone	78-59-1	17	U	17	170	1
04688	2-Methylphenol	95-48-7	35	U	35	170	1
04688	4-Methylphenol	106-44-5	35	U	35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U	17	170	1
04688	3-Nitroaniline	99-09-2	35	U	35	170	1
04688	4-Nitroaniline	100-01-6	70	U	70	170	1
04688	Nitrobenzene	98-95-3	17	U	17	170	1
04688	2-Nitrophenol	88-75-5	17	U	17	170	1
04688	4-Nitrophenol	100-02-7	170	U	170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U	170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL155 SDG#: DE040-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	17	U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	170	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	2.0		0.70	1.7	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.7	1
10138	Anthracene	120-12-7	2.3		0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	9.7		0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	9.4		0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	17		0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	3.7		0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	5.0		0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19	1
10138	Chrysene	218-01-9	15		0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	1.2	J	0.70	1.7	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluoranthene	206-44-0	24		0.70	1.7	1
10138	Fluorene	86-73-7	0.92	J	0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.4		0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	1.2	J	0.70	1.7	1
10138	2-Methylnaphthalene	91-57-6	1.3	J	0.70	1.7	1
10138	Naphthalene	91-20-3	1.2	J	0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	18		0.70	1.7	1
10138	Pyrene	129-00-0	21		0.70	1.7	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.4	1
10401	2,4-DB	94-82-6	9.2	U	9.2	9.2	1
10401	Dicamba	1918-00-9	0.48	J	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.2	J	0.84	1.8	1
10401	MCPA	94-74-6	810		79	260	1
10401	MCPP (Mecoprop)	93-65-2	290		78	260	1
10401	2,4,5-T	93-76-5	0.15	J	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.078	U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

The LCS recovery for 2,4-DP is outside the QC limits. Results from the reextraction are within the limits. 2,4-DP was detected in the in the original extracted sample at 1.1 ug/kg. The reextracted sample did not

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL155 SDG#: DE040-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor

contain 2,4-DP. This is due to the homogeneity of the sample. The hold time had expired prior to the reextraction so all results are reported from the original extract.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not attained.

	Pesticides/PCBs	**SW-846 8081A**	**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.38		0.036	0.17	1
01363	Beta BHC	319-85-7	0.063	U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	7.3	U	7.3	7.3	5
01363	Chlordane	57-74-9	2.3	U	2.3	3.6	1
01363	p,p-DDD	72-54-8	0.14	U	0.14	0.36	1
01363	p,p-DDE	72-55-9	0.34	U	0.34	0.36	1
01363	p,p-DDT	50-29-3	1.3	U	1.3	1.3	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.15	U	0.15	0.36	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.098	U	0.098	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.069	U	0.069	0.36	1
01363	Endrin	72-20-8	0.10	J	0.069	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.069	U	0.069	0.36	1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.36	1
01363	Heptachlor	76-44-8	1.3	U	1.3	3.5	20
01363	Heptachlor Epoxide	1024-57-3	0.036	U	0.036	0.17	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.7	1
01363	Mirex	2385-85-5	0.069	U	0.069	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

	Pesticides/PCBs	**SW-846 8082**	**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	1.0	U	1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34	U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52	U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54	U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52	U	0.52	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL155 SDG#: DE040-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	PCB-1248	12672-29-6	0.34	U	0.34	1.8	1
10225	PCB-1254	11097-69-1	3.5		0.34	1.8	1
10225	PCB-1260	11096-82-5	1.8		0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34	U	0.34	1.8	1
10225	PCB-1268	11100-14-4	0.34	U	0.34	1.8	1
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,300		5.20	20.7	1
07914	Boron	7440-42-8	5.26		0.921	5.17	1
01650	Calcium	7440-70-2	3,280		6.34	20.7	1
01654	Iron	7439-89-6	25,700		4.87	20.7	1
01656	Lithium	7439-93-2	24.4		0.23	2.1	1
01657	Magnesium	7439-95-4	4,760		2.63	10.3	1
06958	Manganese	7439-96-5	331		0.0807	0.517	1
10145	Phosphorus	7723-14-0	483		0.579	10.3	1
01662	Potassium	7440-09-7	3,820		18.6	51.7	1
01667	Sodium	7440-23-5	107		38.6	103	1
07968	Strontium	7440-24-6	25.0		0.0641	0.517	1
06969	Tin	7440-31-5	2.58	J	1.03	10.3	1
06970	Titanium	7440-32-6	1,440		0.393	1.03	1
10146	Zirconium	7440-67-7	1.99	J	0.869	5.17	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.148	J	0.0615	0.205	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.13		0.0615	0.410	2
06126	Barium	7440-39-3	84.6		0.111	0.410	2
06127	Beryllium	7440-41-7	0.526		0.0164	0.102	2
06128	Cadmium	7440-43-9	0.121		0.0369	0.102	2
06131	Chromium	7440-47-3	22.3		0.123	0.410	2
06132	Cobalt	7440-48-4	4.68		0.0205	0.102	2
06133	Copper	7440-50-8	8.75		0.0676	0.410	2
06135	Lead	7439-92-1	6.90		0.0107	0.205	2
06138	Molybdenum	7439-98-7	0.561		0.0512	0.102	2
06139	Nickel	7440-02-0	13.3		0.102	0.410	2
06141	Selenium	7782-49-2	0.0925	J	0.0410	0.410	2
06142	Silver	7440-22-4	0.0459	J	0.0123	0.102	2
06145	Thallium	7440-28-0	0.200		0.0307	0.102	2
06148	Vanadium	7440-62-2	32.0		0.0225	0.102	2
06149	Zinc	7440-66-6	50.5		0.574	3.07	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0084	J	0.0030	0.103	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL155 SDG#: DE040-11

CAT No.	Analysis Name		CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride		16984-48-8	2.5		0.84	1.0	1
		EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0		14797-73-0	9.4	U	9.4	31.3	1
		SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199		18540-29-9	0.47	J	0.21	1.0	1
		ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	393		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	6.82		0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	4.3		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 19:03	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 14:11	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 21:58	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 06:33	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 06:47	Jamie L Brillhart	5
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/20/2011 22:43	Jamie L Brillhart	20
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/29/2010 18:37	Lindsey K Lafferty	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL155 SDG#: DE040-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:28	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:28	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:28	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:28	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:28	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:28	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:39	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:07	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205A	01/12/2011 01:44	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201A	01/07/2011 06:49	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 18:00	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205A	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201A	01/06/2011 00:00	Venia B McFadden	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166084
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL155 SDG#: DE040-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166085
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL149 SDG#: DE040-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	170	U	170	520	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	170	U	170	520	1
04688	Benzyl alcohol	100-51-6	170	U	170	520	1
04688	4-Bromophenyl-phenylether	101-55-3	17	U	17	170	1
04688	Carbazole	86-74-8	17	U	17	170	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	170	1
04688	4-Chloroaniline	106-47-8	70	U	70	170	1
04688	bis(2-Chloroethoxy)methane	111-91-1	17	U	17	170	1
04688	bis(2-Chloroethyl)ether	111-44-4	17	U	17	170	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	17	U	17	170	1
04688	2-Chloronaphthalene	91-58-7	17	U	17	170	1
04688	2-Chlorophenol	95-57-8	17	U	17	170	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	170	1
04688	Dibenzofuran	132-64-9	17	U	17	170	1
04688	1,2-Dichlorobenzene	95-50-1	17	U	17	170	1
04688	1,3-Dichlorobenzene	541-73-1	17	U	17	170	1
04688	1,4-Dichlorobenzene	106-46-7	17	U	17	170	1
04688	3,3'-Dichlorobenzidine	91-94-1	100	U	100	350	1
04688	2,4-Dichlorophenol	120-83-2	17	U	17	170	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	170	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	170	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	170	U	170	520	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	170	1
04688	2,6-Dinitrotoluene	606-20-2	17	U	17	170	1
04688	1,2-Diphenylhydrazine	122-66-7	17	U	17	170	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	170	J	17	350	1
04688	Hexachlorobenzene	118-74-1	17	U	17	170	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	170	1
04688	Hexachlorocyclopentadiene	77-47-4	170	U	170	520	1
04688	Hexachloroethane	67-72-1	17	U	17	170	1
04688	Isophorone	78-59-1	17	U	17	170	1
04688	2-Methylphenol	95-48-7	35	U	35	170	1
04688	4-Methylphenol	106-44-5	35	U	35	170	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	17	U	17	170	1
04688	3-Nitroaniline	99-09-2	35	U	35	170	1
04688	4-Nitroaniline	100-01-6	70	U	70	170	1
04688	Nitrobenzene	98-95-3	17	U	17	170	1
04688	2-Nitrophenol	88-75-5	17	U	17	170	1
04688	4-Nitrophenol	100-02-7	170	U	170	520	1
04688	N-Nitroso-di-n-propylamine	621-64-7	17	U	17	170	1
04688	N-Nitrosodiphenylamine	86-30-6	17	U	17	170	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	170	U	170	520	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166085
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL149 SDG#: DE040-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	17	U	17	170	1
04688	1,2,4-Trichlorobenzene	120-82-1	17	U	17	170	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	170	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	170	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.7	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.7	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.7	1
10138	Benzo(a)anthracene	56-55-3	2.1		0.70	1.7	1
10138	Benzo(a)pyrene	50-32-8	2.8		0.70	1.7	1
10138	Benzo(b)fluoranthene	205-99-2	5.5		0.70	1.7	1
10138	Benzo(g,h,i)perylene	191-24-2	2.6		0.70	1.7	1
10138	Benzo(k)fluoranthene	207-08-9	1.6	J	0.70	1.7	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19	1
10138	Chrysene	218-01-9	3.8		0.35	1.7	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U	0.70	1.7	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Fluoranthene	206-44-0	4.3		0.70	1.7	1
10138	Fluorene	86-73-7	0.70	U	0.70	1.7	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.3	J	0.70	1.7	1
10138	1-Methylnaphthalene	90-12-0	0.93	J	0.70	1.7	1
10138	2-Methylnaphthalene	91-57-6	0.91	J	0.70	1.7	1
10138	Naphthalene	91-20-3	0.94	J	0.70	1.7	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.7	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	2.9		0.70	1.7	1
10138	Pyrene	129-00-0	3.9		0.70	1.7	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.4	1
10401	2,4-DB	94-82-6	0.65	U	0.65	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8	1
10401	MCPA	94-74-6	570		79	260	1
10401	MCPP (Mecoprop)	93-65-2	200	U	200	200	1
10401	2,4,5-T	93-76-5	0.23	U	0.23	0.23	1
10401	2,4,5-TP	93-72-1	0.078	U	0.078	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these

*=This limit was used in the evaluation of the final result

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166085
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL149 SDG#: DE040-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	cases, the reporting limits have been raised. The following compounds were affected: MCPP and 2,4,5-T.						
	Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.035	U	0.035	0.17	1
01363	Beta BHC	319-85-7	0.063	U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.035	U	0.035	0.17	1
01363	Chlordane	57-74-9	0.84	U	0.84	3.5	1
01363	p,p-DDD	72-54-8	0.19	U	0.19	0.35	1
01363	p,p-DDE	72-55-9	0.25	U	0.25	0.35	1
01363	p,p-DDT	50-29-3	1.3	U	1.3	1.3	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.17	1
01363	Dieldrin	60-57-1	0.85	U	0.85	0.85	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069	U	0.069	0.35	1
01363	Endosulfan Sulfate	1031-07-8	0.069	U	0.069	0.35	1
01363	Endrin	72-20-8	0.11	U	0.11	0.35	1
01363	Endrin Aldehyde	7421-93-4	0.19	U	0.19	0.35	1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.35	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.12	U	0.12	0.17	1
01363	Methoxychlor	72-43-5	0.35	U	0.35	1.7	1
01363	Mirex	2385-85-5	0.069	U	0.069	0.35	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.						
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.0	U	1.0	3.4	1
10225	Aroclor 5442	12642-23-8	1.0	U	1.0	3.4	1
10225	Aroclor 5460	11126-42-4	5.0		1.0	3.4	1
10225	PCB-1016	12674-11-2	0.34	U	0.34	1.8	1
10225	PCB-1221	11104-28-2	0.52	U	0.52	1.8	1
10225	PCB-1232	11141-16-5	0.54	U	0.54	1.8	1
10225	PCB-1242	53469-21-9	0.52	U	0.52	1.8	1
10225	PCB-1248	12672-29-6	0.34	U	0.34	1.8	1
10225	PCB-1254	11097-69-1	0.34	U	0.34	1.8	1
10225	PCB-1260	11096-82-5	3.0		0.34	1.8	1
10225	PCB-1262	37324-23-5	0.34	U	0.34	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166085
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL149 SDG#: DE040-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	PCB-1268	11100-14-4	0.34	U	0.34	1.8	1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,000		5.20	20.7	1
07914	Boron	7440-42-8	5.93		0.920	5.17	1
01650	Calcium	7440-70-2	3,370		6.34	20.7	1
01654	Iron	7439-89-6	22,600		4.87	20.7	1
01656	Lithium	7439-93-2	21.9		0.23	2.1	1
01657	Magnesium	7439-95-4	4,170		2.63	10.3	1
06958	Manganese	7439-96-5	294		0.0806	0.517	1
10145	Phosphorus	7723-14-0	382		0.579	10.3	1
01662	Potassium	7440-09-7	3,020		18.6	51.7	1
01667	Sodium	7440-23-5	122		38.5	103	1
07968	Strontium	7440-24-6	18.8		0.0641	0.517	1
06969	Tin	7440-31-5	2.46	J	1.03	10.3	1
06970	Titanium	7440-32-6	1,310		0.393	1.03	1
10146	Zirconium	7440-67-7	1.39	J	0.868	5.17	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0979	J	0.0626	0.209	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.28		0.0626	0.418	2
06126	Barium	7440-39-3	83.5		0.113	0.418	2
06127	Beryllium	7440-41-7	0.554		0.0167	0.104	2
06128	Cadmium	7440-43-9	0.365		0.0376	0.104	2
06131	Chromium	7440-47-3	36.3		0.125	0.418	2
06132	Cobalt	7440-48-4	6.07		0.0209	0.104	2
06133	Copper	7440-50-8	10.8		0.0689	0.418	2
06135	Lead	7439-92-1	14.4		0.0109	0.209	2
06138	Molybdenum	7439-98-7	1.07		0.0522	0.104	2
06139	Nickel	7440-02-0	22.3		0.104	0.418	2
06141	Selenium	7782-49-2	0.130	J	0.0418	0.418	2
06142	Silver	7440-22-4	0.0767	J	0.0125	0.104	2
06145	Thallium	7440-28-0	0.262		0.0313	0.104	2
06148	Vanadium	7440-62-2	37.8		0.0230	0.104	2
06149	Zinc	7440-66-6	289		1.46	7.83	5
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0199	J	0.0029	0.101	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3		0.84	1.0	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.4	U	9.4	31.3	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166085
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL149 SDG#: DE040-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.59	J	0.21	1.0	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	433		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.48		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	4.2		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 19:37	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 14:44	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 22:25	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 07:01	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 18:28	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:31	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:31	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:31	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166085
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL149 SDG#: DE040-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:31	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:31	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:31	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:43	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:34	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:34	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:34	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:34	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/31/2010 07:16	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:08	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 01:58	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 07:13	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 18:08	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL156 SDG#: DE040-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	72	U	72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U	720	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U	72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	72	U	72	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	540	1
04688	Phenol	108-95-2	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL156 SDG#: DE040-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	58		0.72	1.8	1
10138	Acenaphthylene	208-96-8	55		0.36	1.8	1
10138	Anthracene	120-12-7	230		0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	550		7.2	18	10
10138	Benzo(a)pyrene	50-32-8	410		7.2	18	10
10138	Benzo(b)fluoranthene	205-99-2	440		7.2	18	10
10138	Benzo(g,h,i)perylene	191-24-2	160		0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	210		0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19	1
10138	Chrysene	218-01-9	660		3.6	18	10
10138	Dibenz(a,h)anthracene	53-70-3	46		0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.6	J	6.4	19	1
10138	Fluoranthene	206-44-0	970		7.2	18	10
10138	Fluorene	86-73-7	190		0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	140		0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	330		0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	340		0.72	1.8	1
10138	Naphthalene	91-20-3	330		7.2	18	10
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
10138	Phenanthrene	85-01-8	1,800		7.2	18	10
10138	Pyrene	129-00-0	1,400		7.2	18	10
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	2.2	J	1.3	3.9	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.7	1
10401	2,4-DB	94-82-6	14	U	14	14	1
10401	Dicamba	1918-00-9	0.80	J	0.43	1.3	1
10401	Dinoseb	88-85-7	0.86	U	0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.97	J	0.86	1.8	1
10401	MCPA	94-74-6	680		82	270	1
10401	MCPP (Mecoprop)	93-65-2	580		81	270	1
10401	2,4,5-T	93-76-5	0.088	U	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.081	U	0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

The LCS recovery for 2,4-DP is outside the QC limits. Results from the reextraction are within the limits. 2,4-DP was detected in the in the original extracted sample at 0.90 ug/kg. The reextracted sample did not

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL156 SDG#: DE040-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor

contain 2,4-DP. This is due to the homogeneity of the sample. The hold time had expired prior to the reextraction so all results are reported from the original extract.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not attained.

	Pesticides/PCBs	**SW-846 8081A**	**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	1.4	U	1.4	3.6	20
01363	Alpha BHC	319-84-6	0.73	U	0.73	3.6	20
01363	Beta BHC	319-85-7	1.3	U	1.3	3.6	20
01363	Gamma BHC - Lindane	58-89-9	0.73	U	0.73	3.6	20
01363	Chlordane	57-74-9	17	U	17	73	20
01363	p,p-DDD	72-54-8	1.4	U	1.4	7.3	20
01363	p,p-DDE	72-55-9	8.4	U	8.4	8.4	20
01363	p,p-DDT	50-29-3	20	U	20	20	20
01363	Delta BHC	319-86-8	0.77	U	0.77	3.6	20
01363	Dieldrin	60-57-1	4.5	U	4.5	7.3	20
01363	Endosulfan I	959-98-8	0.95	U	0.95	3.6	20
01363	Endosulfan II	33213-65-9	1.4	U	1.4	7.3	20
01363	Endosulfan Sulfate	1031-07-8	5.6	U	5.6	7.3	20
01363	Endrin	72-20-8	1.4	U	1.4	7.3	20
01363	Endrin Aldehyde	7421-93-4	1.4	U	1.4	7.3	20
01363	Endrin Ketone	53494-70-5	1.4	U	1.4	7.3	20
01363	Heptachlor	76-44-8	2.1	U	2.1	3.6	20
01363	Heptachlor Epoxide	1024-57-3	16	U	16	16	20
01363	Methoxychlor	72-43-5	7.3	U	7.3	36	20
01363	Mirex	2385-85-5	1.4	U	1.4	7.3	20
01363	Toxaphene	8001-35-2	47	U	47	140	20

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

	Pesticides/PCBs	**SW-846 8082**	**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	11	U	11	35	10
10225	Aroclor 5442	12642-23-8	11	U	11	35	10
10225	Aroclor 5460	11126-42-4	36		11	35	10
10225	PCB-1016	12674-11-2	3.5	U	3.5	18	10
10225	PCB-1221	11104-28-2	5.4	U	5.4	18	10
10225	PCB-1232	11141-16-5	5.6	U	5.6	18	10
10225	PCB-1242	53469-21-9	5.4	U	5.4	18	10
10225	PCB-1248	12672-29-6	280		3.5	18	10
10225	PCB-1254	11097-69-1	350		3.5	18	10
10225	PCB-1260	11096-82-5	50		3.5	18	10

*=This limit was used in the evaluation of the final result

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL156 SDG#: DE040-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	PCB-1262	37324-23-5	3.5	U	3.5	18	10
10225	PCB-1268	11100-14-4	3.5	U	3.5	18	10
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,200		5.35	21.3	1
07914	Boron	7440-42-8	7.79		0.946	5.32	1
01650	Calcium	7440-70-2	3,270		6.52	21.3	1
01654	Iron	7439-89-6	22,300		5.01	21.3	1
01656	Lithium	7439-93-2	19.5		0.23	2.1	1
01657	Magnesium	7439-95-4	4,010		2.70	10.6	1
06958	Manganese	7439-96-5	371		0.0830	0.532	1
10145	Phosphorus	7723-14-0	310		0.596	10.6	1
01662	Potassium	7440-09-7	3,620		19.1	53.2	1
01667	Sodium	7440-23-5	110		39.7	106	1
07968	Strontium	7440-24-6	22.1		0.0659	0.532	1
06969	Tin	7440-31-5	2.51	J	1.06	10.6	1
06970	Titanium	7440-32-6	1,340		0.404	1.06	1
10146	Zirconium	7440-67-7	2.60	J	0.893	5.32	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.115	J	0.0638	0.213	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.15		0.0638	0.425	2
06126	Barium	7440-39-3	96.7		0.115	0.425	2
06127	Beryllium	7440-41-7	0.551		0.0170	0.106	2
06128	Cadmium	7440-43-9	4.35		0.0383	0.106	2
06131	Chromium	7440-47-3	25.9		0.128	0.425	2
06132	Cobalt	7440-48-4	5.49		0.0213	0.106	2
06133	Copper	7440-50-8	18.5		0.0702	0.425	2
06135	Lead	7439-92-1	43.0		0.0111	0.213	2
06138	Molybdenum	7439-98-7	0.983		0.0532	0.106	2
06139	Nickel	7440-02-0	14.6		0.106	0.425	2
06141	Selenium	7782-49-2	0.0985	J	0.0425	0.425	2
06142	Silver	7440-22-4	0.129		0.0128	0.106	2
06145	Thallium	7440-28-0	0.247		0.0319	0.106	2
06148	Vanadium	7440-62-2	35.9		0.0234	0.106	2
06149	Zinc	7440-66-6	69.1		0.596	3.19	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0880	J	0.0030	0.103	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.1		0.86	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7	U	9.7	32.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL156 SDG#: DE040-13

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199		18540-29-9	1.6	0.21	1.1	1
		ASTM D1498		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	440	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	8.03	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	6.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 20:12	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 15:17	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 20:54	Gregory J Drahovsky	10
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 22:53	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 07:29	Jamie L Brillhart	20
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 18:47	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL156 SDG#: DE040-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:35	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:35	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:35	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:35	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:35	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:35	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:47	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:37	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:37	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:37	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:37	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:09	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 02:41	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 08:25	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 18:32	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166086
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL156 SDG#: DE040-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166087
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL150 SDG#: DE040-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Butylbenzylphthalate	85-68-7	18	U	18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	70	U	70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	Diethylphthalate	84-66-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	Dimethylphthalate	131-11-3	18	U	18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	48	J	18	350	1
04688	Fluoranthene	206-44-0	19	J	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	70	U	70	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166087
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL150 SDG#: DE040-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	18	U	18	180	1
04688	Pentachlorophenol	87-86-5	180	U	180	530	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	Pyrene	129-00-0	22	J	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.5	U	3.5	8.8	5
10138	Acenaphthylene	208-96-8	1.8	J	1.8	8.8	5
10138	Anthracene	120-12-7	1.8	U	1.8	8.8	5
10138	Benzo(a)anthracene	56-55-3	6.6	J	3.5	8.8	5
10138	Benzo(a)pyrene	50-32-8	7.1	J	3.5	8.8	5
10138	Benzo(b)fluoranthene	205-99-2	14		3.5	8.8	5
10138	Benzo(g,h,i)perylene	191-24-2	4.3	J	3.5	8.8	5
10138	Benzo(k)fluoranthene	207-08-9	5.1	J	3.5	8.8	5
10138	Chrysene	218-01-9	11		1.8	8.8	5
10138	Dibenz(a,h)anthracene	53-70-3	3.5	U	3.5	8.8	5
10138	Fluorene	86-73-7	3.5	U	3.5	8.8	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.5	U	3.5	8.8	5
10138	1-Methylnaphthalene	90-12-0	3.5	U	3.5	8.8	5
10138	2-Methylnaphthalene	91-57-6	4.5	J	3.5	8.8	5
10138	Naphthalene	91-20-3	24		3.5	8.8	5
10138	N-Nitrosodimethylamine	62-75-9	3.5	U	3.5	8.8	5
10138	Phenanthrene	85-01-8	7.5	J	3.5	8.8	5
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5	1
10401	2,4-DB	94-82-6	0.65	U	0.65	1.8	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.84	U	0.84	1.8	1
10401	MCPA	94-74-6	390		80	260	1
10401	MCPP (Mecoprop)	93-65-2	350	U	350	350	1
10401	2,4,5-T	93-76-5	0.18	U	0.18	0.18	1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
	Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166087
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL150 SDG#: DE040-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	Despite numerous cleanup methods, our usual reporting limits were not attained.						
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.2	U	2.2	5.3	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.069	U	0.069	0.17	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.17	1
01363	Beta BHC	319-85-7	0.078	J	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.040	U	0.040	0.17	1
01363	Chlordane	57-74-9	1.8	U	1.8	3.6	1
01363	p,p-DDD	72-54-8	0.28	U	0.28	0.36	1
01363	p,p-DDE	72-55-9	0.69	U	0.69	0.69	1
01363	p,p-DDT	50-29-3	1.8	U	1.8	1.8	1
01363	Delta BHC	319-86-8	0.059	J	0.038	0.17	1
01363	Dieldrin	60-57-1	0.48	U	0.48	0.48	1
01363	Endosulfan I	959-98-8	0.046	U	0.046	0.17	1
01363	Endosulfan II	33213-65-9	0.069	U	0.069	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.069	U	0.069	0.36	1
01363	Endrin	72-20-8	0.069	U	0.069	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.11	U	0.11	0.36	1
01363	Endrin Ketone	53494-70-5	0.069	U	0.069	0.36	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.19	U	0.19	0.19	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.7	1
01363	Mirex	2385-85-5	0.73	U	0.73	0.73	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	6.9	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.						
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	4.4		1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	3.9		0.35	1.8	1
10225	PCB-1260	11096-82-5	2.4		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166087
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL150 SDG#: DE040-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,500		5.19	20.6	1
07914	Boron	7440-42-8	5.99		0.918	5.16	1
01650	Calcium	7440-70-2	3,330		6.33	20.6	1
01654	Iron	7439-89-6	25,100		4.86	20.6	1
01656	Lithium	7439-93-2	27.3		0.23	2.1	1
01657	Magnesium	7439-95-4	5,180		2.62	10.3	1
06958	Manganese	7439-96-5	286		0.0805	0.516	1
10145	Phosphorus	7723-14-0	369		0.578	10.3	1
01662	Potassium	7440-09-7	3,360		18.6	51.6	1
01667	Sodium	7440-23-5	117		38.5	103	1
07968	Strontium	7440-24-6	20.1		0.0640	0.516	1
06969	Tin	7440-31-5	2.89	J	1.03	10.3	1
06970	Titanium	7440-32-6	1,260		0.392	1.03	1
10146	Zirconium	7440-67-7	0.993	J	0.867	5.16	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.139	J	0.0632	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.71		0.0632	0.421	2
06126	Barium	7440-39-3	96.5		0.114	0.421	2
06127	Beryllium	7440-41-7	0.635		0.0168	0.105	2
06128	Cadmium	7440-43-9	0.286		0.0379	0.105	2
06131	Chromium	7440-47-3	34.9		0.126	0.421	2
06132	Cobalt	7440-48-4	6.56		0.0211	0.105	2
06133	Copper	7440-50-8	11.2		0.0695	0.421	2
06135	Lead	7439-92-1	18.1		0.0109	0.211	2
06138	Molybdenum	7439-98-7	0.997		0.0526	0.105	2
06139	Nickel	7440-02-0	21.9		0.105	0.421	2
06141	Selenium	7782-49-2	0.143	J	0.0421	0.421	2
06142	Silver	7440-22-4	0.0714	J	0.0126	0.105	2
06145	Thallium	7440-28-0	0.233		0.0316	0.105	2
06148	Vanadium	7440-62-2	43.8		0.0232	0.105	2
06149	Zinc	7440-66-6	91.7		0.589	3.16	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0135	J	0.0030	0.104	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0		0.84	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.6	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.82	J	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166087
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL150 SDG#: DE040-14

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	440	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.69	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.0	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 20:46	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 15:49	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 23:20	Sarah M Snyder	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	103500020A	12/21/2010 18:28	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 07:43	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 20:19	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	103500020A	12/17/2010 09:10	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:45	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:45	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166087
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL150 SDG#: DE040-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:45	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:45	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:45	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:45	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 13:58	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:40	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:40	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:40	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:40	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:10	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 02:55	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 08:50	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 18:48	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166088
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL181 SDG#: DE040-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	72	U	72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U	720	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U	72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	72	U	72	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	540	1
04688	Phenol	108-95-2	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166088
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL181 SDG#: DE040-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8	1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.72	U	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.72	U	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.93	J	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.72	U	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20	1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	20	1
10138	Chrysene	218-01-9	0.79	J	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20	1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5	U	6.5	20	1
10138	Fluoranthene	206-44-0	0.94	J	0.72	1.8	1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	U	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.72	U	0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.72	U	0.72	1.8	1
10138	Naphthalene	91-20-3	0.72	U	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20	1
10138	Phenanthrene	85-01-8	0.78	J	0.72	1.8	1
10138	Pyrene	129-00-0	0.84	J	0.72	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U	4.8	9.8	1
10401	2,4-DB	94-82-6	6.3	U	6.3	6.3	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.87	U	0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87	U	0.87	1.8	1
10401	MCPA	94-74-6	83	U	83	270	1
10401	MCPP (Mecoprop)	93-65-2	330		82	270	1
10401	2,4,5-T	93-76-5	0.089	U	0.089	0.18	1
10401	2,4,5-TP	93-72-1	0.082	U	0.082	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166088
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL181 SDG#: DE040-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	cases, the reporting limits have been raised. The following compound was affected: 2,4-DB.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.072	U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.037	U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.12	U	0.12	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037	U	0.037	0.18	1
01363	Chlordane	57-74-9	0.87	U	0.87	3.7	1
01363	p,p-DDD	72-54-8	0.14	U	0.14	0.37	1
01363	p,p-DDE	72-55-9	0.26	U	0.26	0.37	1
01363	p,p-DDT	50-29-3	0.58	U	0.58	0.58	1
01363	Delta BHC	319-86-8	0.045	J	0.039	0.18	1
01363	Dieldrin	60-57-1	0.077	U	0.077	0.37	1
01363	Endosulfan I	959-98-8	0.048	U	0.048	0.18	1
01363	Endosulfan II	33213-65-9	0.072	U	0.072	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.52	U	0.52	0.52	1
01363	Endrin	72-20-8	0.072	U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.19	U	0.19	0.37	1
01363	Endrin Ketone	53494-70-5	0.072	U	0.072	0.37	1
01363	Heptachlor	76-44-8	0.065	U	0.065	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.037	U	0.037	0.18	1
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8	1
01363	Mirex	2385-85-5	0.40	U	0.40	0.40	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.2	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.						
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	12		1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.8	1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.8	1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.8	1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.8	1
10225	PCB-1254	11097-69-1	6.0		0.36	1.8	1
10225	PCB-1260	11096-82-5	5.7		0.36	1.8	1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.8	1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.8	1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,900		5.36	21.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166088
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL181 SDG#: DE040-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
07914	Boron	7440-42-8	6.21		0.948	5.33	1
01650	Calcium	7440-70-2	3,150		6.53	21.3	1
01654	Iron	7439-89-6	20,000		5.02	21.3	1
01656	Lithium	7439-93-2	17.3		0.23	2.1	1
01657	Magnesium	7439-95-4	3,340		2.71	10.7	1
06958	Manganese	7439-96-5	327		0.0831	0.533	1
10145	Phosphorus	7723-14-0	258		0.597	10.7	1
01662	Potassium	7440-09-7	3,310		19.2	53.3	1
01667	Sodium	7440-23-5	102	J	39.7	107	1
07968	Strontium	7440-24-6	25.5		0.0661	0.533	1
06969	Tin	7440-31-5	2.56	J	1.07	10.7	1
06970	Titanium	7440-32-6	1,300		0.405	1.07	1
10146	Zirconium	7440-67-7	2.27	J	0.895	5.33	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.175	J	0.0627	0.209	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.38		0.0627	0.418	2
06126	Barium	7440-39-3	113		0.113	0.418	2
06127	Beryllium	7440-41-7	0.656		0.0167	0.105	2
06128	Cadmium	7440-43-9	0.242		0.0376	0.105	2
06131	Chromium	7440-47-3	24.0		0.125	0.418	2
06132	Cobalt	7440-48-4	6.23		0.0209	0.105	2
06133	Copper	7440-50-8	11.3		0.0690	0.418	2
06135	Lead	7439-92-1	12.8		0.0109	0.209	2
06138	Molybdenum	7439-98-7	0.733		0.0523	0.105	2
06139	Nickel	7440-02-0	15.1		0.105	0.418	2
06141	Selenium	7782-49-2	0.147	J	0.0418	0.418	2
06142	Silver	7440-22-4	0.0727	J	0.0125	0.105	2
06145	Thallium	7440-28-0	0.264		0.0314	0.105	2
06148	Vanadium	7440-62-2	40.9		0.0230	0.105	2
06149	Zinc	7440-66-6	58.8		0.585	3.14	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0128	J	0.0031	0.107	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.7		0.87	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.6	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.63	J	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166088
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL181 SDG#: DE040-15

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	436	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.49	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	8.0	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 21:21	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 16:22	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	12/31/2010 23:47	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 07:57	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 20:38	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:48	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:48	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:48	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166088
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL181 SDG#: DE040-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:48	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:48	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:48	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 14:02	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:49	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/31/2010 07:18	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:49	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:49	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:49	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:11	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 03:09	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 09:14	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 19:04	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166089
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL136 SDG#: DE040-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzoic acid	65-85-0	180	U	180	550	1
04688	Benzyl alcohol	100-51-6	180	U	180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Butylbenzylphthalate	85-68-7	18	U	18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180	1
04688	4-Chloroaniline	106-47-8	73	U	73	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	Diethylphthalate	84-66-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180	1
04688	Dimethylphthalate	131-11-3	18	U	18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	370	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	37	U	37	180	1
04688	4-Methylphenol	106-44-5	37	U	37	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	37	U	37	180	1
04688	4-Nitroaniline	100-01-6	73	U	73	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166089
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL136 SDG#: DE040-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	18	U	18	180	1
04688	Pentachlorophenol	87-86-5	180	U	180	550	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.7	U	3.7	9.1	5
10138	Acenaphthylene	208-96-8	1.8	U	1.8	9.1	5
10138	Anthracene	120-12-7	1.8	U	1.8	9.1	5
10138	Benzo(a)anthracene	56-55-3	6.4	J	3.7	9.1	5
10138	Benzo(a)pyrene	50-32-8	7.8	J	3.7	9.1	5
10138	Benzo(b)fluoranthene	205-99-2	13		3.7	9.1	5
10138	Benzo(g,h,i)perylene	191-24-2	6.8	J	3.7	9.1	5
10138	Benzo(k)fluoranthene	207-08-9	3.7	U	3.7	9.1	5
10138	Chrysene	218-01-9	13		1.8	9.1	5
10138	Dibenz(a,h)anthracene	53-70-3	3.7	U	3.7	9.1	5
10138	Fluoranthene	206-44-0	8.0	J	3.7	9.1	5
10138	Fluorene	86-73-7	3.7	U	3.7	9.1	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.7	U	3.7	9.1	5
10138	1-Methylnaphthalene	90-12-0	3.7	U	3.7	9.1	5
10138	2-Methylnaphthalene	91-57-6	3.7	U	3.7	9.1	5
10138	Naphthalene	91-20-3	24		3.7	9.1	5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U	3.7	9.1	5
10138	Phenanthrene	85-01-8	4.4	J	3.7	9.1	5
10138	Pyrene	129-00-0	7.5	J	3.7	9.1	5
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U	4.8	9.9	1
10401	2,4-DB	94-82-6	0.68	U	0.68	1.9	1
10401	Dicamba	1918-00-9	0.44	U	0.44	1.3	1
10401	Dinoseb	88-85-7	0.88	U	0.88	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.88	U	0.88	1.9	1
10401	MCPA	94-74-6	150	U	150	270	1
10401	MCPP (Mecoprop)	93-65-2	110	J	82	270	1
10401	2,4,5-T	93-76-5	0.14	J	0.090	0.19	1
10401	2,4,5-TP	93-72-1	0.082	U	0.082	0.19	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
	When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the						

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166089
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL136 SDG#: DE040-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compound was affected: MCPA.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.072	U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.037	U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.066	U	0.066	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037	U	0.037	0.18	1
01363	Chlordane	57-74-9	2.1	U	2.1	3.7	1
01363	p,p-DDD	72-54-8	0.082	U	0.082	0.37	1
01363	p,p-DDE	72-55-9	0.072	U	0.072	0.37	1
01363	p,p-DDT	50-29-3	0.71	U	0.71	0.71	1
01363	Delta BHC	319-86-8	0.039	U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.18	U	0.18	0.37	1
01363	Endosulfan I	959-98-8	0.048	U	0.048	0.18	1
01363	Endosulfan II	33213-65-9	0.072	U	0.072	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.072	U	0.072	0.37	1
01363	Endrin	72-20-8	0.072	U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.30	U	0.30	0.37	1
01363	Endrin Ketone	53494-70-5	0.072	U	0.072	0.37	1
01363	Heptachlor	76-44-8	0.066	U	0.066	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.037	U	0.037	0.18	1
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8	1
01363	Mirex	2385-85-5	0.53	U	0.53	0.53	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.2	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.						
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Reporting limits were raised due to interference from the sample matrix.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	7.7		1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9	1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9	1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.9	1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9	1
10225	PCB-1248	12672-29-6	9.9		0.36	1.9	1
10225	PCB-1254	11097-69-1	24		0.36	1.9	1
10225	PCB-1260	11096-82-5	12		0.36	1.9	1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9	1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9	1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166089
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL136 SDG#: DE040-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,900		5.52	21.9	1
07914	Boron	7440-42-8	4.64	J	0.976	5.48	1
01650	Calcium	7440-70-2	4,040		6.72	21.9	1
01654	Iron	7439-89-6	21,400		5.16	21.9	1
01656	Lithium	7439-93-2	17.1		0.24	2.2	1
01657	Magnesium	7439-95-4	4,070		2.79	11.0	1
06958	Manganese	7439-96-5	216		0.0855	0.548	1
10145	Phosphorus	7723-14-0	791		0.614	11.0	1
01662	Potassium	7440-09-7	3,240		19.7	54.8	1
01667	Sodium	7440-23-5	209		40.9	110	1
07968	Strontium	7440-24-6	25.0		0.0680	0.548	1
06969	Tin	7440-31-5	2.25	J	1.10	11.0	1
06970	Titanium	7440-32-6	1,360		0.417	1.10	1
10146	Zirconium	7440-67-7	1.39	J	0.921	5.48	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.150	J	0.0639	0.213	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.75		0.0639	0.426	2
06126	Barium	7440-39-3	144		0.115	0.426	2
06127	Beryllium	7440-41-7	0.504		0.0170	0.106	2
06128	Cadmium	7440-43-9	0.351		0.0383	0.106	2
06131	Chromium	7440-47-3	25.0		0.128	0.426	2
06132	Cobalt	7440-48-4	5.60		0.0213	0.106	2
06133	Copper	7440-50-8	11.9		0.0703	0.426	2
06135	Lead	7439-92-1	44.6		0.0111	0.213	2
06138	Molybdenum	7439-98-7	0.477		0.0532	0.106	2
06139	Nickel	7440-02-0	14.5		0.106	0.426	2
06141	Selenium	7782-49-2	0.104	J	0.0426	0.426	2
06142	Silver	7440-22-4	1.06		0.0128	0.106	2
06145	Thallium	7440-28-0	0.241		0.0319	0.106	2
06148	Vanadium	7440-62-2	38.4		0.0234	0.106	2
06149	Zinc	7440-66-6	145		0.596	3.19	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0387	J	0.0031	0.108	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6		0.88	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9	U	9.9	32.9	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	2.4		0.22	1.1	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166089
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL136 SDG#: DE040-16

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	406	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.62	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	8.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 21:55	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 16:55	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	01/01/2011 00:15	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 08:11	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 20:56	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:51	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:51	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:51	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166089
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL136 SDG#: DE040-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:51	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:51	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:51	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 14:06	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/31/2010 07:19	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:15	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 03:23	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 09:38	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 19:20	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166090
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL203 SDG#: DE040-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	25	J	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	73	U	73	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	73	U	73	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	540	1
04688	Phenol	108-95-2	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166090
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL203 SDG#: DE040-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	260		0.73	1.8	1
10138	Acenaphthylene	208-96-8	2.3		0.36	1.8	1
10138	Anthracene	120-12-7	320		0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	410		7.3	18	10
10138	Benzo(a)pyrene	50-32-8	360		7.3	18	10
10138	Benzo(b)fluoranthene	205-99-2	460		7.3	18	10
10138	Benzo(g,h,i)perylene	191-24-2	200		0.73	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	220		0.73	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20	1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	20	1
10138	Chrysene	218-01-9	430		3.6	18	10
10138	Dibenz(a,h)anthracene	53-70-3	62		0.73	1.8	1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20	1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	14	J	6.5	20	1
10138	Fluoranthene	206-44-0	1,100		7.3	18	10
10138	Fluorene	86-73-7	190		0.73	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	200		0.73	1.8	1
10138	1-Methylnaphthalene	90-12-0	38		0.73	1.8	1
10138	2-Methylnaphthalene	91-57-6	48		0.73	1.8	1
10138	Naphthalene	91-20-3	50		0.73	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20	1
10138	Phenanthrene	85-01-8	1,100		7.3	18	10
10138	Pyrene	129-00-0	1,000		7.3	18	10
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	3.7	J	1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U	4.8	9.8	1
10401	2,4-DB	94-82-6	0.68	U	0.68	1.9	1
10401	Dicamba	1918-00-9	0.47	J	0.44	1.3	1
10401	Dinoseb	88-85-7	0.87	U	0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	22		0.87	1.9	1
10401	MCPA	94-74-6	83	U	83	270	1
10401	MCPP (Mecoprop)	93-65-2	82	U	82	270	1
10401	2,4,5-T	93-76-5	0.089	U	0.089	0.19	1
10401	2,4,5-TP	93-72-1	0.082	U	0.082	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

The LCS recovery for 2,4-DP is outside the QC limits. Results from the reextraction are within the limits. 2,4-DP was detected in the in the original extracted sample at 20.21 ug/kg. The reextracted sample did not

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166090
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL203 SDG#: DE040-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	contain 2,4-DP. This is due to the homogeneity of the sample. The hold time had expired prior to the reextraction so all results are reported from the original extract.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.072	U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.056	U	0.056	0.18	1
01363	Beta BHC	319-85-7	0.65	U	0.65	1.8	10
01363	Gamma BHC - Lindane	58-89-9	0.059	U	0.059	0.18	1
01363	Chlordane	57-74-9	0.87	U	0.87	3.7	1
01363	p,p-DDD	72-54-8	1.0	U	1.0	1.0	1
01363	p,p-DDE	72-55-9	0.072	U	0.072	0.37	1
01363	p,p-DDT	50-29-3	1.1	U	1.1	1.1	1
01363	Delta BHC	319-86-8	0.039	U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.072	U	0.072	0.37	1
01363	Endosulfan I	959-98-8	0.048	U	0.048	0.18	1
01363	Endosulfan II	33213-65-9	0.17	U	0.17	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.072	U	0.072	0.37	1
01363	Endrin	72-20-8	0.072	U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	1.6	U	1.6	1.6	1
01363	Endrin Ketone	53494-70-5	0.17	U	0.17	0.37	1
01363	Heptachlor	76-44-8	0.21	U	0.21	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.070	U	0.070	0.18	1
01363	Methoxychlor	72-43-5	3.7	U	3.7	18	10
01363	Mirex	2385-85-5	2.2	U	2.2	2.2	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.2	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.						
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						
	Reporting limits were raised due to interference from the sample matrix.						
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	2.9	J	1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9	1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.9	1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.9	1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.9	1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9	1
10225	PCB-1254	11097-69-1	1.9		0.36	1.9	1
10225	PCB-1260	11096-82-5	2.5		0.36	1.9	1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9	1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166090
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL203 SDG#: DE040-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,000		5.22	20.7	1
07914	Boron	7440-42-8	6.14		0.923	5.19	1
01650	Calcium	7440-70-2	3,520		6.36	20.7	1
01654	Iron	7439-89-6	23,900		4.89	20.7	1
01656	Lithium	7439-93-2	21.6		0.23	2.1	1
01657	Magnesium	7439-95-4	4,420		2.64	10.4	1
06958	Manganese	7439-96-5	290		0.0809	0.519	1
10145	Phosphorus	7723-14-0	386		0.581	10.4	1
01662	Potassium	7440-09-7	3,940		18.7	51.9	1
01667	Sodium	7440-23-5	113		38.7	104	1
07968	Strontium	7440-24-6	25.0		0.0643	0.519	1
06969	Tin	7440-31-5	2.62	J	1.04	10.4	1
06970	Titanium	7440-32-6	1,330		0.394	1.04	1
10146	Zirconium	7440-67-7	1.46	J	0.871	5.19	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.134	J	0.0641	0.214	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.13		0.0641	0.427	2
06126	Barium	7440-39-3	101		0.115	0.427	2
06127	Beryllium	7440-41-7	0.663		0.0171	0.107	2
06128	Cadmium	7440-43-9	0.203		0.0384	0.107	2
06131	Chromium	7440-47-3	25.7		0.128	0.427	2
06132	Cobalt	7440-48-4	6.21		0.0214	0.107	2
06133	Copper	7440-50-8	11.6		0.0705	0.427	2
06135	Lead	7439-92-1	8.50		0.0111	0.214	2
06138	Molybdenum	7439-98-7	0.728		0.0534	0.107	2
06139	Nickel	7440-02-0	15.4		0.107	0.427	2
06141	Selenium	7782-49-2	0.112	J	0.0427	0.427	2
06142	Silver	7440-22-4	0.0325	J	0.0128	0.107	2
06145	Thallium	7440-28-0	0.264		0.0320	0.107	2
06148	Vanadium	7440-62-2	40.9		0.0235	0.107	2
06149	Zinc	7440-66-6	61.8		0.598	3.20	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0451	J	0.0030	0.104	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.1		0.87	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.7	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.44	J	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166090
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL203 SDG#: DE040-17

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	450	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.31	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	8.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 22:30	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 21:27	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/06/2011 10:26	Joseph M Gambler	10
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	01/01/2011 00:42	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 08:25	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 08:39	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 21:15	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:55	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:55	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166090
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL203 SDG#: DE040-17

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:55	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:55	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:55	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:55	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 14:10	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:56	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:16	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 03:37	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 10:02	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11014243202A	01/19/2011 19:36	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166091
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL257 SDG#: DE040-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	560	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzo(a)anthracene	56-55-3	30	J	19	190	1
04688	Benzo(a)pyrene	50-32-8	26	J	19	190	1
04688	Benzo(b)fluoranthene	205-99-2	37	J	19	190	1
04688	Benzo(g,h,i)perylene	191-24-2	26	J	19	190	1
04688	Benzoic acid	65-85-0	190	U	190	560	1
04688	Benzyl alcohol	100-51-6	190	U	190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190	1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190	1
04688	4-Chloroaniline	106-47-8	74	U	74	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190	1
04688	Chrysene	218-01-9	51	J	19	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	Diethylphthalate	84-66-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190	1
04688	Dimethylphthalate	131-11-3	19	U	19	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560	1
04688	2,4-Dinitrophenol	51-28-5	740	U	740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	40	J	19	370	1
04688	Fluoranthene	206-44-0	50	J	19	190	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	74	U	74	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	37	U	37	190	1
04688	4-Methylphenol	106-44-5	37	U	37	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	37	U	37	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166091
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL257 SDG#: DE040-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	4-Nitroaniline	100-01-6	74	U	74	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	19	U	19	190	1
04688	Pentachlorophenol	87-86-5	190	U	190	560	1
04688	Phenanthrene	85-01-8	51	J	19	190	1
04688	Phenol	108-95-2	19	U	19	190	1
04688	Pyrene	129-00-0	63	J	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.7	U	3.7	9.3	5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.3	5
10138	Anthracene	120-12-7	4.1	J	1.9	9.3	5
10138	Benzo(k)fluoranthene	207-08-9	15		3.7	9.3	5
10138	Dibenz(a,h)anthracene	53-70-3	11		3.7	9.3	5
10138	Fluorene	86-73-7	3.7	U	3.7	9.3	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	12		3.7	9.3	5
10138	1-Methylnaphthalene	90-12-0	23		3.7	9.3	5
10138	2-Methylnaphthalene	91-57-6	27		3.7	9.3	5
10138	Naphthalene	91-20-3	39		3.7	9.3	5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U	3.7	9.3	5
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0	1
10401	Dalapon	75-99-0	4.9	U	4.9	10	1
10401	2,4-DB	94-82-6	0.69	U	0.69	1.9	1
10401	Dicamba	1918-00-9	0.44	U	0.44	1.3	1
10401	Dinoseb	88-85-7	0.89	U	0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U	0.89	1.9	1
10401	MCPA	94-74-6	84	U	84	280	1
10401	MCPP (Mecoprop)	93-65-2	83	U	83	280	1
10401	2,4,5-T	93-76-5	0.091	U	0.091	0.19	1
10401	2,4,5-TP	93-72-1	0.083	U	0.083	0.19	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.073	U	0.073	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166091
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL257 SDG#: DE040-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Alpha BHC	319-84-6	0.056	J	0.038	0.18	1
01363	Beta BHC	319-85-7	0.25		0.067	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.14	U	0.14	0.18	1
01363	Chlordane	57-74-9	0.89	U	0.89	3.8	1
01363	p,p-DDD	72-54-8	2.3		0.073	0.38	1
01363	p,p-DDE	72-55-9	1.8	U	1.8	1.8	1
01363	p,p-DDT	50-29-3	1.4	U	1.4	1.4	1
01363	Delta BHC	319-86-8	0.040	U	0.040	0.18	1
01363	Dieldrin	60-57-1	0.30	U	0.30	0.38	1
01363	Endosulfan I	959-98-8	0.049	U	0.049	0.18	1
01363	Endosulfan II	33213-65-9	0.073	U	0.073	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.073	U	0.073	0.38	1
01363	Endrin	72-20-8	0.073	U	0.073	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.64	U	0.64	0.64	1
01363	Endrin Ketone	53494-70-5	0.073	U	0.073	0.38	1
01363	Heptachlor	76-44-8	0.17	J	0.067	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.11	U	0.11	0.18	1
01363	Methoxychlor	72-43-5	0.38	U	0.38	1.8	1
01363	Mirex	2385-85-5	0.073	U	0.073	0.38	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.3	1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	3.0	J	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9	1
10225	PCB-1232	11141-16-5	0.58	U	0.58	1.9	1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9	1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9	1
10225	PCB-1254	11097-69-1	0.37	U	0.37	1.9	1
10225	PCB-1260	11096-82-5	0.67	J	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9	1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,500		5.43	21.6	1
07914	Boron	7440-42-8	5.19	J	0.960	5.39	1
01650	Calcium	7440-70-2	2,640		6.61	21.6	1
01654	Iron	7439-89-6	20,000		5.08	21.6	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166091
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL257 SDG#: DE040-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	21.7		0.24	2.2	1
01657	Magnesium	7439-95-4	3,840		2.74	10.8	1
06958	Manganese	7439-96-5	255		0.0841	0.539	1
10145	Phosphorus	7723-14-0	317		0.604	10.8	1
01662	Potassium	7440-09-7	2,670		19.4	53.9	1
01667	Sodium	7440-23-5	89.8	J	40.2	108	1
07968	Strontium	7440-24-6	14.9		0.0669	0.539	1
06969	Tin	7440-31-5	3.01	J	1.08	10.8	1
06970	Titanium	7440-32-6	1,160		0.410	1.08	1
10146	Zirconium	7440-67-7	1.26	J	0.906	5.39	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.132	J	0.0654	0.218	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.80		0.0654	0.436	2
06126	Barium	7440-39-3	69.0		0.118	0.436	2
06127	Beryllium	7440-41-7	0.525		0.0174	0.109	2
06128	Cadmium	7440-43-9	0.179		0.0392	0.109	2
06131	Chromium	7440-47-3	19.3		0.131	0.436	2
06132	Cobalt	7440-48-4	5.17		0.0218	0.109	2
06133	Copper	7440-50-8	7.82		0.0719	0.436	2
06135	Lead	7439-92-1	16.9		0.0113	0.218	2
06138	Molybdenum	7439-98-7	0.572		0.0545	0.109	2
06139	Nickel	7440-02-0	11.8		0.109	0.436	2
06141	Selenium	7782-49-2	0.0807	J	0.0436	0.436	2
06142	Silver	7440-22-4	1.03		0.0131	0.109	2
06145	Thallium	7440-28-0	0.218		0.0327	0.109	2
06148	Vanadium	7440-62-2	33.8		0.0240	0.109	2
06149	Zinc	7440-66-6	81.0		0.610	3.27	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0062	J	0.0031	0.107	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6		0.89	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10	U	10	33.3	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	450		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166091
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL257 SDG#: DE040-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.19	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	10.0	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 23:04	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 22:00	Gregory J Drahovsky	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	01/01/2011 02:05	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 08:53	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 21:33	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 14:58	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 14:58	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 14:58	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166091
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL257 SDG#: DE040-18

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 14:58	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 14:58	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 14:58	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 14:14	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 13:59	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 13:59	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 13:59	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 13:59	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:17	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 03:52	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 10:50	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 19:44	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166092
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL204 SDG#: DE040-19*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Butylbenzylphthalate	85-68-7	18	U	18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	Diethylphthalate	84-66-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	Dimethylphthalate	131-11-3	18	U	18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166092
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL204 SDG#: DE040-19*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	18	U	18	180	1
04688	Pentachlorophenol	87-86-5	180	U	180	540	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	Pyrene	129-00-0	19	J	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.6	U	3.6	8.9	5
10138	Acenaphthylene	208-96-8	1.8	U	1.8	8.9	5
10138	Anthracene	120-12-7	1.8	U	1.8	8.9	5
10138	Benzo(a)anthracene	56-55-3	3.6	U	3.6	8.9	5
10138	Benzo(a)pyrene	50-32-8	3.6	U	3.6	8.9	5
10138	Benzo(b)fluoranthene	205-99-2	4.9	J	3.6	8.9	5
10138	Benzo(g,h,i)perylene	191-24-2	3.6	U	3.6	8.9	5
10138	Benzo(k)fluoranthene	207-08-9	3.6	U	3.6	8.9	5
10138	Chrysene	218-01-9	4.2	J	1.8	8.9	5
10138	Dibenz(a,h)anthracene	53-70-3	3.6	U	3.6	8.9	5
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6,000		320	960	50
10138	Fluoranthene	206-44-0	8.2	J	3.6	8.9	5
10138	Fluorene	86-73-7	3.6	U	3.6	8.9	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.6	U	3.6	8.9	5
10138	1-Methylnaphthalene	90-12-0	3.6	U	3.6	8.9	5
10138	2-Methylnaphthalene	91-57-6	3.6	U	3.6	8.9	5
10138	Naphthalene	91-20-3	24		3.6	8.9	5
10138	N-Nitrosodimethylamine	62-75-9	3.6	U	3.6	8.9	5
10138	Phenanthrene	85-01-8	5.1	J	3.6	8.9	5
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	26	U	26	77	20
10401	Dalapon	75-99-0	94	U	94	190	20
10401	2,4-DB	94-82-6	13	U	13	36	20
10401	Dicamba	1918-00-9	8.6	U	8.6	26	20
10401	Dinoseb	88-85-7	17	U	17	51	20
10401	2,4-DP (Dichlorprop)	120-36-5	17	U	17	36	20
10401	MCPA	94-74-6	1,600	U	1,600	5,400	20
10401	MCPP (Mecoprop)	93-65-2	1,600	U	1,600	5,400	20
10401	2,4,5-T	93-76-5	1.8	U	1.8	3.6	20
10401	2,4,5-TP	93-72-1	1.6	U	1.6	3.6	20
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported. Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166092
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL204 SDG#: DE040-19*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.35	U	0.35	0.89	5
01363	Alpha BHC	319-84-6	0.30	U	0.30	0.89	5
01363	Beta BHC	319-85-7	0.32	U	0.32	0.89	5
01363	Gamma BHC - Lindane	58-89-9	0.51	U	0.51	0.89	5
01363	Chlordane	57-74-9	4.3	U	4.3	18	5
01363	p,p-DDD	72-54-8	3.0	U	3.0	3.0	5
01363	p,p-DDE	72-55-9	0.38	U	0.38	1.8	5
01363	p,p-DDT	50-29-3	5.1	U	5.1	5.1	5
01363	Delta BHC	319-86-8	0.19	U	0.19	0.89	5
01363	Dieldrin	60-57-1	0.70	U	0.70	1.8	5
01363	Endosulfan I	959-98-8	0.24	U	0.24	0.89	5
01363	Endosulfan II	33213-65-9	0.35	U	0.35	1.8	5
01363	Endosulfan Sulfate	1031-07-8	1.4	U	1.4	7.3	20
01363	Endrin	72-20-8	0.35	U	0.35	1.8	5
01363	Endrin Aldehyde	7421-93-4	1.4	U	1.4	7.3	20
01363	Endrin Ketone	53494-70-5	1.4	U	1.4	7.3	20
01363	Heptachlor	76-44-8	0.32	U	0.32	0.89	5
01363	Heptachlor Epoxide	1024-57-3	0.18	U	0.18	0.89	5
01363	Methoxychlor	72-43-5	7.3	U	7.3	36	20
01363	Mirex	2385-85-5	2.3	U	2.3	7.3	20
01363	Toxaphene	8001-35-2	12	U	12	35	5

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. Endosulfan II is accepted based on this allowance.

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	3.8		1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.56	U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.8	1
10225	PCB-1248	12672-29-6	1.1	J	0.35	1.8	1
10225	PCB-1254	11097-69-1	2.3		0.35	1.8	1
10225	PCB-1260	11096-82-5	2.0		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,900		5.34	21.2	1
07914	Boron	7440-42-8	4.93	J	0.944	5.31	1
01650	Calcium	7440-70-2	3,330		6.51	21.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166092
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL204 SDG#: DE040-19*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01654	Iron	7439-89-6	21,200		5.00	21.2	1
01656	Lithium	7439-93-2	20.0		0.23	2.1	1
01657	Magnesium	7439-95-4	3,900		2.70	10.6	1
06958	Manganese	7439-96-5	262		0.0828	0.531	1
10145	Phosphorus	7723-14-0	356		0.594	10.6	1
01662	Potassium	7440-09-7	2,590		19.1	53.1	1
01667	Sodium	7440-23-5	117		39.6	106	1
07968	Strontium	7440-24-6	24.4		0.0658	0.531	1
06969	Tin	7440-31-5	2.56	J	1.06	10.6	1
06970	Titanium	7440-32-6	1,200		0.403	1.06	1
10146	Zirconium	7440-67-7	3.02	J	0.891	5.31	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0824	J	0.0618	0.206	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.59		0.0618	0.412	2
06126	Barium	7440-39-3	90.9		0.111	0.412	2
06127	Beryllium	7440-41-7	0.534		0.0165	0.103	2
06128	Cadmium	7440-43-9	0.190		0.0371	0.103	2
06131	Chromium	7440-47-3	18.5		0.124	0.412	2
06132	Cobalt	7440-48-4	5.99		0.0206	0.103	2
06133	Copper	7440-50-8	8.06		0.0680	0.412	2
06135	Lead	7439-92-1	7.61		0.0107	0.206	2
06138	Molybdenum	7439-98-7	0.652		0.0515	0.103	2
06139	Nickel	7440-02-0	11.7		0.103	0.412	2
06141	Selenium	7782-49-2	0.146	J	0.0412	0.412	2
06142	Silver	7440-22-4	0.0326	J	0.0124	0.103	2
06145	Thallium	7440-28-0	0.211		0.0309	0.103	2
06148	Vanadium	7440-62-2	32.6		0.0227	0.103	2
06149	Zinc	7440-66-6	60.7		0.577	3.09	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0060	J	0.0028	0.0994	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0		0.86	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	32.2	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.28	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	459		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166092
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL204 SDG#: DE040-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.40	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10354SLG026	01/16/2011 23:38	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/05/2011 22:32	Gregory J Drahovsky	5
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354SLJ026	01/06/2011 10:58	Joseph M Gambler	50
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10354SLJ026	12/21/2010 06:30	Joseph S Feister	1
00381	BNA Soil Sonication	SW-846 3550B	1	10354SLG026	12/21/2010 07:00	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103610014A	01/10/2011 02:09	John W Perkins	20
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/13/2011 09:21	Jamie L Brillhart	5
01363	12a Pesticides by 8081A	SW-846 8081A	1	103550008A	01/14/2011 21:44	Jamie L Brillhart	20
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103540020A	12/30/2010 21:52	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103550008A	12/21/2010 15:00	Olivia I Santiago	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103540020A	12/21/2010 02:00	Roman Kuropatkin	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103610014A	12/28/2010 01:40	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708001	12/30/2010 15:02	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708001	12/30/2010 15:02	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708001	12/30/2010 15:02	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166092
LLI Group # 1225757
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

Submitted: 12/16/2010 10:00
Reported: 01/24/2011 11:23

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL204 SDG#: DE040-19*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708001	12/30/2010 15:02	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708001	12/30/2010 15:02	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708001	12/30/2010 15:02	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708001	12/29/2010 14:17	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026001D	12/30/2010 14:02	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026001C	12/30/2010 14:02	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026001B	12/30/2010 14:02	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026001A	12/30/2010 14:02	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103545711001	12/21/2010 06:18	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708001	12/20/2010 12:10	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026001	12/20/2010 12:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711001	12/20/2010 16:08	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11008008205B	01/12/2011 04:34	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11006006201B	01/07/2011 11:14	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11014243202A	01/19/2011 12:36	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11008008205B	01/08/2011 13:50	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	110006006201B	01/06/2011 00:00	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10351182102B	12/17/2010 13:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10351039402B	12/17/2010 13:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11014243202A	01/14/2011 19:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225757
Reported: 01/24/11 at 11:23 AM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10354SLG026	Sample number(s): 6166074-6166080,6166082-6166092									
Aniline	170 U		170.	500	ug/kg	58		10-107		
Anthracene	17	U	17.	170	ug/kg	97		76-112		
Benzidine	1,200 U		1,200.	3,300	ug/kg	43		15-121		
Benzo(a)anthracene	17	U	17.	170	ug/kg	97		73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	86		69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	83		61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	86		65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	85		67-125		
Benzoic acid	170 U		170.	500	ug/kg	85		10-154		
Benzyl alcohol	170 U		170.	500	ug/kg	87		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	89		79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	97		75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	92		79-112		
Carbazole	17	U	17.	170	ug/kg	99		77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	92		74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	66		10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	98		70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	83		70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	90		68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	86		67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	93		72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	96		79-110		
Chrysene	17	U	17.	170	ug/kg	95		76-113		
Dibenzofuran	17	U	17.	170	ug/kg	99		79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	88		79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	89		70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	89		74-106		
3,3'-Dichlorobenzidine	100 U		100.	330	ug/kg	52		38-105		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	92		75-111		
Diethylphthalate	17	U	17.	170	ug/kg	99		76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	96		72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	106		70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	99		77-109		
4,6-Dinitro-2-methylphenol	170 U		170.	500	ug/kg	83		53-110		
2,4-Dinitrophenol	670 U		670.	2,000	ug/kg	81		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	104		73-115		
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	99		79-115		
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	99		77-111		
bis(2-Ethylhexyl)phthalate	17	U	17.	330	ug/kg	96		75-117		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225757
Reported: 01/24/11 at 11:23 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	17	U	17.	170	ug/kg	98		78-116		
Hexachlorobenzene	17	U	17.	170	ug/kg	94		78-116		
Hexachlorobutadiene	67	U	67.	170	ug/kg	97		70-112		
Hexachlorocyclopentadiene	170	U	170.	500	ug/kg	105		46-115		
Hexachloroethane	17	U	17.	170	ug/kg	90		68-105		
Indeno(1,2,3-cd)pyrene	17	U	17.	170	ug/kg	87		64-119		
Isophorone	17	U	17.	170	ug/kg	92		69-110		
1-Methylnaphthalene	17	U	17.	170	ug/kg	94		74-105		
2-Methylnaphthalene	17	U	17.	170	ug/kg	89		76-105		
2-Methylphenol	33	U	33.	170	ug/kg	91		66-110		
4-Methylphenol	33	U	33.	170	ug/kg	84		66-117		
2-Nitroaniline	17	U	17.	170	ug/kg	100		78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	96		62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	74		49-98		
Nitrobenzene	17	U	17.	170	ug/kg	99		71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	95		81-114		
4-Nitrophenol	170	U	170.	500	ug/kg	107		56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	83		63-107		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	94		67-141		
Di-n-octylphthalate	17	U	17.	170	ug/kg	82		68-130		
Pentachlorophenol	170	U	170.	500	ug/kg	78		35-106		
Phenanthrene	17	U	17.	170	ug/kg	96		77-113		
Phenol	17	U	17.	170	ug/kg	92		58-112		
Pyrene	17	U	17.	170	ug/kg	98		75-115		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	95		73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	99		76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	98		78-111		
Batch number: 10354SLJ026	Sample number(s): 6166074-6166080,6166082-6166092									
Acenaphthene	0.67	U	0.67	1.7	ug/kg	83		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	86		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	87		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	90		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	83		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	91		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	83		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	85		66-137		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	85		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	94		84-132		
Chrysene	0.33	U	0.33	1.7	ug/kg	85		79-120		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	81		62-142		
Diethylphthalate	6.0	U	6.0	18	ug/kg	78		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	86		70-130		
Bis(2-Ethylhexyl)phthalate	6.0	U	6.0	18	ug/kg	96		67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	92		78-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	91		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	82		62-141		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	88		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	79		62-120		
Naphthalene	0.67	U	0.67	1.7	ug/kg	84		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	92		39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	85		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	85		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	86		56-121		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225757
Reported: 01/24/11 at 11:23 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 103610014A	Sample number(s): 6166074-6166080,6166082-6166092									
2,4-D	1.2	U	1.2	3.6	ug/kg	105		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	46		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	109		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	94		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	7*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	157*		60-141		
MCPA	76	U	76.	250	ug/kg	91		34-113		
MCPP (Mecoprop)	75	U	75.	250	ug/kg	88		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	110		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	92		48-138		
Batch number: 103500020A	Sample number(s): 6166077,6166087									
6a Perchlorate EPA 6850	2.1	U	2.1	5.0	ug/kg	99		85-115		
Batch number: 103540020A	Sample number(s): 6166074-6166080,6166082-6166092									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	90	79	75-125	13	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	120		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	125		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 103550008A	Sample number(s): 6166074-6166080,6166082-6166092									
Aldrin	0.066	U	0.066	0.17	ug/kg	55		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	67		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	72		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	76		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	84		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	71		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	118		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	81		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	88		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	85		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	60*		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	92		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	94		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	61		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	90		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	88		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	68		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	103		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					
Batch number: 103541026001A	Sample number(s): 6166074-6166080,6166082-6166092									
Antimony	0.0583	U	0.0583	0.194	mg/kg	111		11-208		
Arsenic	0.0583	U	0.0583	0.388	mg/kg	99		80-120		
Beryllium	0.0155	U	0.0155	0.0971	mg/kg	106		82-118		
Cadmium	0.0350	U	0.0350	0.0971	mg/kg	102		82-118		
Chromium	0.117	U	0.117	0.388	mg/kg	111		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225757
Reported: 01/24/11 at 11:23 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Cobalt	0.0194	U	0.0194	0.0971	mg/kg	102		82-118		
Copper	0.0641	U	0.0641	0.388	mg/kg	105		80-120		
Lead	0.0101	U	0.0101	0.194	mg/kg	102		80-120		
Nickel	0.0971	U	0.0971	0.388	mg/kg	106		80-120		
Silver	0.0117	U	0.0117	0.0971	mg/kg	103		66-134		
Thallium	0.0291	U	0.0291	0.0971	mg/kg	103		81-119		
Vanadium	0.0214	U	0.0214	0.0971	mg/kg	105		90-110		
Zinc	0.544	U	0.544	2.91	mg/kg	101		78-122		
Batch number: 103541026001B	Sample number(s): 6166074-6166080,6166082-6166092									
Selenium	0.0388	U	0.0388	0.388	mg/kg	107		79-122		
Batch number: 103541026001C	Sample number(s): 6166074-6166080,6166082-6166092									
Molybdenum	0.0485	U	0.0485	0.0971	mg/kg	109		78-122		
Batch number: 103541026001D	Sample number(s): 6166074-6166080,6166082-6166092									
Barium	0.105	U	0.105	0.388	mg/kg	105		79-121		
Batch number: 103545708001	Sample number(s): 6166074-6166080,6166082-6166092									
Aluminum	15.3	J	4.93	19.6	mg/kg	99		61-110		
Boron	0.873	U	0.873	4.90	mg/kg	95		78-110		
Calcium	13.6	J	6.01	19.6	mg/kg	93		88-110		
Iron	5.87	J	4.62	19.6	mg/kg	99		61-110		
Lithium	0.22	U	0.22	2.0	mg/kg	91		80-120		
Magnesium	2.49	U	2.49	9.80	mg/kg	90		82-110		
Manganese	0.0765	U	0.0765	0.490	mg/kg	101		81-119		
Phosphorus	2.33	J	0.549	9.80	mg/kg	94		80-120		
Potassium	17.6	U	17.6	49.0	mg/kg	100		78-110		
Sodium	36.6	U	36.6	98.0	mg/kg	99		87-110		
Strontium	0.0814	J	0.0608	0.490	mg/kg	96		79-121		
Tin	1.32	J	0.980	9.80	mg/kg	100		90-114		
Titanium	0.373	U	0.373	0.980	mg/kg	110		80-120		
Zirconium	0.824	U	0.824	4.90	mg/kg	95		80-120		
Batch number: 103545711001	Sample number(s): 6166074-6166080,6166082-6166092									
Mercury	0.0027	U	0.0027	0.0925	mg/kg	91		88-123		
Batch number: 11006006201A	Sample number(s): 6166074-6166080,6166082-6166084									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	91		85-115		
Batch number: 11006006201B	Sample number(s): 6166085-6166092									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	91		85-115		
Batch number: 11008008205A	Sample number(s): 6166074-6166080,6166082-6166084									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	105		90-110		
Batch number: 11008008205B	Sample number(s): 6166085-6166092									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	105		90-110		
Batch number: 11014243202A	Sample number(s): 6166074-6166080,6166082-6166092									
3a Cr VI by EPA 7199	0.20	U	0.20	1.0	mg/kg	95		80-120		
Batch number: 10351039402A	Sample number(s): 6166074-6166080,6166082-6166083									
22a pH by 9045C						100		95-105		
Batch number: 10351039402B	Sample number(s): 6166084-6166092									
22a pH by 9045C						100		95-105		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225757
Reported: 01/24/11 at 11:23 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10351182102A	Sample number(s): 6166074-6166080,6166082-6166083								
Oxidation Reduction Potential					100		98-102		
Batch number: 10351182102B	Sample number(s): 6166084-6166092								
Oxidation Reduction Potential					100		98-102		
Batch number: 10356162402A	Sample number(s): 6166074-6166079								
28a Moisture Content by 160.3					100		80-120		
Batch number: 10356162402B	Sample number(s): 6166080,6166082-6166092								
28a Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10354SLG026	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166074								
Aniline	0*	58	14-114	200*	30				
Anthracene	101	103	75-115	2	30				
Benzidine	0*	0*	35-141	0	30				
Benzo(a)anthracene	104	106	65-122	2	30				
Benzo(a)pyrene	86	94	57-126	8	30				
Benzo(b)fluoranthene	90	94	59-125	4	30				
Benzo(g,h,i)perylene	84	91	59-127	8	30				
Benzo(k)fluoranthene	85	92	56-132	8	30				
Benzoic acid	178*	175*	10-173	2	30				
Benzyl alcohol	94	101	55-123	7	30				
4-Bromophenyl-phenylether	101	103	67-129	1	30				
Butylbenzylphthalate	134	142*	73-134	6	30				
Di-n-butylphthalate	100	107	67-123	6	30				
Carbazole	98	105	64-120	7	30				
4-Chloro-3-methylphenol	98	104	53-130	7	30				
4-Chloroaniline	69	82	23-95	17	30				
bis(2-Chloroethoxy)methane	100	108	54-117	7	30				
bis(2-Chloroethyl)ether	107	100	60-116	6	30				
bis(2-Chloroisopropyl)ether	106	107	55-142	1	30				
2-Chloronaphthalene	84	96	50-141	13	30				
2-Chlorophenol	103	108	73-121	5	30				
4-Chlorophenyl-phenylether	95	99	64-119	4	30				
Chrysene	100	109	62-128	8	30				
Dibenzofuran	97	102	71-112	5	30				
1,2-Dichlorobenzene	97	100	66-108	3	30				
1,3-Dichlorobenzene	95	96	63-109	1	30				
1,4-Dichlorobenzene	95	100	53-113	5	30				
3,3'-Dichlorobenzidine	57	77	25-123	29	30				
2,4-Dichlorophenol	99	104	78-117	5	30				
Diethylphthalate	94	100	66-118	6	30				
2,4-Dimethylphenol	104	107	56-130	2	30				
3,5-Dimethylphenol	146*	150*	70-130	3	30				
Dimethylphthalate	95	103	64-118	8	30				
4,6-Dinitro-2-methylphenol	78	79	10-148	0	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225757
Reported: 01/24/11 at 11:23 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2,4-Dinitrophenol	0*	0*	20-143	0	30				
2,4-Dinitrotoluene	79	83	57-114	5	30				
2,6-Dinitrotoluene	94	98	69-123	4	30				
1,2-Diphenylhydrazine	118	124	71-129	5	30				
bis(2-Ethylhexyl)phthalate	132*	138*	63-122	5	30				
Fluoranthene	90	94	59-122	4	30				
Hexachlorobenzene	97	102	61-111	5	30				
Hexachlorobutadiene	107	107	62-120	0	30				
Hexachlorocyclopentadiene	0*	0*	10-153	0	30				
Hexachloroethane	83	82	57-109	2	30				
Indeno(1,2,3-cd)pyrene	87	88	61-126	1	30				
Isophorone	99	105	51-118	6	30				
1-Methylnaphthalene	98	103	73-112	4	30				
2-Methylnaphthalene	97	96	76-114	1	30				
2-Methylphenol	93	98	47-142	5	30				
4-Methylphenol	99	100	55-126	1	30				
2-Nitroaniline	111	132*	67-125	17	30				
3-Nitroaniline	91	107	59-122	16	30				
4-Nitroaniline	95	110	52-112	15	30				
Nitrobenzene	102	106	51-114	4	30				
2-Nitrophenol	83	83	74-115	0	30				
4-Nitrophenol	90	101	39-133	11	30				
N-Nitroso-di-n-propylamine	99	105	60-116	6	30				
N-Nitrosodiphenylamine	108	114	86-145	5	30				
Di-n-octylphthalate	146*	158*	56-126	8	30				
Pentachlorophenol	82	83	17-149	2	30				
Phenanthrene	102	105	65-125	3	30				
Phenol	99	101	58-126	1	30				
Pyrene	119	128	51-151	7	30				
1,2,4-Trichlorobenzene	102	110	72-115	8	30				
2,4,5-Trichlorophenol	107	109	34-139	2	30				
2,4,6-Trichlorophenol	105	114	49-140	8	30				
Batch number: 10354SLJ026	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166074								
Acenaphthene	127*	109*	63-105	15	30				
Acenaphthylene	122	108	55-126	12	30				
Anthracene	138*	115	46-136	18	30				
Benzo(a)anthracene	206*	176*	39-144	16	30				
Benzo(a)pyrene	132	116	34-156	13	30				
Benzo(b)fluoranthene	188*	125	43-155	29	30				
Benzo(g,h,i)perylene	47	57	33-141	8	30				
Benzo(k)fluoranthene	125	108	42-144	15	30				
Butylbenzylphthalate	0*	0*	73-140	0	30				
Di-n-butylphthalate	0*	0*	78-160	0	30				
Chrysene	316*	114	29-156	69*	30				
Dibenz(a,h)anthracene	80	91	41-130	13	30				
Diethylphthalate	0*	0*	87-131	0	30				
Dimethylphthalate	0*	0*	74-118	0	30				
Bis(2-Ethylhexyl)phthalate	0*	0*	39-167	0	30				
Fluoranthene	924*	169*	26-166	125*	30				
Fluorene	125*	121	45-121	3	30				
Indeno(1,2,3-cd)pyrene	81	91	21-143	12	30				
1-Methylnaphthalene	177*	145*	72-123	9	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225757
Reported: 01/24/11 at 11:23 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2-Methylnaphthalene	136*	120	28-121	5	30				
Naphthalene	93 (2)	102 (2)	61-102	2	30				
N-Nitrosodimethylamine	90	92	48-113	2	30				
Di-n-octylphthalate	0*	0*	40-192	0	30				
Phenanthrene	515*	198*	12-165	47*	30				
Pyrene	668*	137	15-153	113*	30				
Batch number: 103610014A	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166074								
2,4-D	82	88	28-161	7	35				
Dalapon	46	48	12-86	4	50				
2,4-DB	14*	22	20-170	8	50				
Dicamba	99	106	33-120	7	50				
Dinoseb	16	13	1-44	17	35				
2,4-DP (Dichlorprop)	82	121	55-141	38	50				
MCPA	114	92	31-184	18	50				
MCPP (Mecoprop)	52	43	16-174	19	50				
2,4,5-T	73	78	25-132	5	35				
2,4,5-TP	39	39	10-183	0	35				
Batch number: 103500020A	Sample number(s): 6166077,6166087 UNSPK: P164948								
6a Perchlorate EPA 6850	100	100	80-120	0	20				
Batch number: 103540020A	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166074								
PCB-1016	134	172*	29-146	25	50				
PCB-1260	121	94	39-149	25	50				
Batch number: 103550008A	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166075								
Aldrin	0*	0*	16-126	0	50				
Alpha BHC	0*	0*	10-129	0	50				
Beta BHC	0*	0*	14-147	0	50				
Gamma BHC - Lindane	0*	0*	10-140	0	50				
p,p-DDD	0*	0*	16-163	0	50				
p,p-DDE	-39337 (2)	-29706 (2)	18-161	53*	50				
p,p-DDT	-27483 (2)	-17011 (2)	10-176	39	50				
Delta BHC	0*	0*	23-140	0	50				
Dieldrin	583*	621*	19-154	6	50				
Endosulfan I	0*	0*	16-137	0	50				
Endosulfan II	0*	0*	28-154	0	50				
Endosulfan Sulfate	0*	398*	21-160	200*	50				
Endrin	0*	0*	11-149	0	50				
Endrin Aldehyde	0*	576*	10-148	200*	35				
Endrin Ketone	0*	0*	22-165	0	50				
Heptachlor	0*	0*	13-126	0	50				
Heptachlor Epoxide	0*	0*	13-157	0	50				
Methoxychlor	227*	0*	32-147	200*	50				
Batch number: 103541026001A	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166075 BKG: 6166075								
Antimony	48*	49*	75-125	3	20	0.131 J	0.0606 J	74* (1)	20
Arsenic	106	141*	75-125	14	20	2.62	2.80	6	20
Beryllium	99	96	75-125	2	20	0.326	0.358	9 (1)	20
Cadmium	95	99	75-125	5	20	0.130	0.123	5 (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225757
Reported: 01/24/11 at 11:23 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chromium	143*	134*	75-125	3	20	13.1	21.8	50*	20
Cobalt	89	86	75-125	2	20	3.50	3.77	7	20
Copper	102	91	75-125	6	20	6.16	7.26	16	20
Lead	323*	91	75-125	44*	20	9.30	8.23	12	20
Nickel	110	112	75-125	1	20	10.8	14.4	28*	20
Silver	97	98	75-125	2	20	0.0569 J	0.0505 J	12 (1)	20
Thallium	92	86	75-125	4	20	0.137	0.133	3 (1)	20
Vanadium	147*	118	75-125	6	20	28.0	29.3	4	20
Zinc	536 (2)	104 (2)	75-125	36*	20	85.3	90.8	6	20
Batch number: 103541026001B	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166075 BKG: 6166075								
Selenium	93	92	75-125	0	20	0.117 J	0.106 J	10 (1)	20
Batch number: 103541026001C	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166075 BKG: 6166075								
Molybdenum	96	98	75-125	3	20	0.391	0.494	23* (1)	20
Batch number: 103541026001D	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166075 BKG: 6166075								
Barium	212 (2)	93 (2)	75-125	17	20	54.3	58.4	7	20
Batch number: 103545708001	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166074 BKG: 6166074								
Aluminum	933 (2)	702 (2)	75-125	3	20	12,400	13,900	12	20
Boron	98	98	84-115	1	20	6.17	6.01	3 (1)	20
Calcium	214 (2)	96 (2)	75-125	14	20	2,710	2,750	1	20
Iron	889 (2)	-1018 (2)	75-125	10	20	17,900	24,400	31*	20
Lithium	97	86	82-114	9	20	13.8	18.0	27*	20
Magnesium	199 (2)	-40 (2)	75-125	13	20	3,280	4,010	20	20
Manganese	193 (2)	80 (2)	75-125	21*	20	195	305	44*	20
Phosphorus	250*	57*	75-125	37*	20	354	432	20	20
Potassium	137*	117	75-125	5	20	2,240	2,370	6	20
Sodium	106	108	75-125	2	20	115	108	6 (1)	20
Strontium	84	84	75-115	1	20	23.7	17.4	31*	20
Tin	94	92	80-110	1	20	2.31 J	2.57 J	11 (1)	20
Titanium	239 (2)	141 (2)	75-125	7	20	1,070	1,120	5	20
Zirconium	98	90	75-125	7	20	2.09 J	2.51 J	18 (1)	20
Batch number: 103545711001	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166074 BKG: 6166074								
Mercury	101	101	65-135	3	20	0.0028 U	0.0029 J	200* (1)	20
Batch number: 11006006201A	Sample number(s): 6166074-6166080,6166082-6166084 UNSPK: 6166074 BKG: 6166074								
7a Perchlorate EPA 314.0	92		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11006006201B	Sample number(s): 6166085-6166092 UNSPK: 6166085 BKG: 6166085								
7a Perchlorate EPA 314.0	82		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11008008205A	Sample number(s): 6166074-6166080,6166082-6166084 UNSPK: 6166074 BKG: 6166074								
11a Anions by 300.0 - Fluoride	94		80-120			0.80 U	1.4	200* (1)	20
Batch number: 11008008205B	Sample number(s): 6166085-6166092 UNSPK: 6166085 BKG: 6166085								
11a Anions by 300.0 - Fluoride	100		80-120			1.2	2.0	51* (1)	20
Batch number: 11014243202A	Sample number(s): 6166074-6166080,6166082-6166092 UNSPK: 6166092 BKG: 6166092								
3a Cr VI by EPA 7199	106		75-125			0.27 J	0.78 J	99* (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225757
Reported: 01/24/11 at 11:23 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10351039402A	Sample number(s): 6166074-6166080,6166082-6166083					BKG: 6166074			
22a pH by 9045C						6.86	6.86	0	1
Batch number: 10351039402B	Sample number(s): 6166084-6166092					BKG: P166190			
22a pH by 9045C						6.85	6.89	1	1
Batch number: 10351182102A	Sample number(s): 6166074-6166080,6166082-6166083					BKG: 6166074			
Oxidation Reduction Potential						403	405	0	6
Batch number: 10351182102B	Sample number(s): 6166084-6166092					BKG: P166193			
Oxidation Reduction Potential						403	414	3	6
Batch number: 10356162402A	Sample number(s): 6166074-6166079					BKG: 6166079			
28a Moisture Content by 160.3						5.1	5.2	2	20
Batch number: 10356162402B	Sample number(s): 6166080,6166082-6166092					BKG: 6166080			
28a Moisture Content by 160.3						9.9	9.5	4	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 10354SLG026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6166074	97	96	90	86	95	96
6166075	95	90	83	80	94	94
6166076	93	92	95	85	94	94
6166077	94	93	93	84	94	88
6166078	89	86	92	80	89	88
6166079	93	91	93	79	91	90
6166080	90	88	96	80	92	92
6166082	95	93	97	82	94	95
6166083	93	93	93	83	93	87
6166084	92	87	95	81	93	93
6166085	89	88	83	80	87	87
6166086	90	88	90	83	91	94
6166087	91	89	95	85	96	91
6166088	88	86	91	79	91	93
6166089	88	88	84	80	89	85
6166090	91	87	90	81	93	95
6166091	93	90	98	86	99	92
6166092	91	88	95	84	96	96
Blank	83	85	87	79	93	84
LCS	90	91	103	91	93	85
MS	92	90	90	94	96	96
MSD	96	91	93	95	99	102

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225757
Reported: 01/24/11 at 11:23 AM

Surrogate Quality Control

Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10354SLJ026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6166074	111	88	84
6166075	120	88	92
6166076	92	84	82
6166077	79	65	59
6166078	90	83	69
6166079	90	81	84
6166080	90	81	84
6166082	90	85	86
6166083	88	81	78
6166084	88	80	81
6166085	90	81	79
6166086	85	74	88
6166087	81	79	73
6166088	87	82	87
6166089	65	61	61
6166090	87	81	83
6166091	88	74	68
6166092	83	78	75
Blank	89	79	88
LCS	100	69	83
MS	121	77	87
MSD	108	90	85
Limits:	40-130	45-130	45-135

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 103540020A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6166074	80	140*
6166075	17*	21*
6166076	115	119
6166077	98	145*
6166078	161*	192*
6166079	76	106
6166080	105	119
6166082	106	94
6166083	138	188*
6166084	148*	143*
6166085	135	121*
6166086	89	81
6166087	101	93
6166088	125	117
6166089	100	84
6166090	130	95
6166091	114	100
6166092	90	92
Blank	128	133*
LCS	110	113
LCSD	105	120
MS	89	126*

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225757
Reported: 01/24/11 at 11:23 AM

Surrogate Quality Control

MSD	73	99
Limits:	53-139	45-120

Analysis Name: 12a Pesticides by 8081A
Batch number: 103550008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6166074	56	76
6166075	73	0*
6166076	68	31
6166077	115	0*
6166078	65	159*
6166079	91	0*
6166080	61	217*
6166082	58	30
6166083	64	53
6166084	70	59
6166085	49*	84
6166086	63	0*
6166087	55	23
6166088	54	77
6166089	55	30
6166090	41*	0*
6166091	72	69
6166092	60	0*
Blank	61	110
LCS	51	50
MS	63	779*
MSD	63	0*
Limits:	50-130	20-120

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 103610014A

	2,4-Dichlorophenylacetic acid
6166074	94
6166075	115
6166076	100
6166077	85
6166078	111
6166079	96
6166080	119
6166082	98
6166083	95
6166084	99
6166085	113
6166086	67
6166087	78
6166088	106
6166089	98
6166090	91
6166091	89
6166092	0*
Blank	79

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225757
Reported: 01/24/11 at 11:23 AM

Surrogate Quality Control

LCS	92
MS	104
MSD	97
Limits:	36-156

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

13013 1225757 61666074-92

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure SA and DUP

Samplers: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270SIM	TPH-GRO EPA 8015B	TPH-DRO EPA 8015B Mod.	*Metals EPA 6010/6020/7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-303-SA5B-SS-0.0-0.5	12.15.10	0940	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-262-SA5B-SS-0.0-0.5MS	12.15.10	0925	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X										MS/MSD
SL-302-SA5B-SS-0.0-0.5	12.15.10	0949	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
DUP06-SA5B-QC-121510	12.15.10	0935	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										DUP
SL-263-SA5B-SS-0.0-0.5	12.15.10	0907	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-264-SA5B-SS-0.0-0.5	12.15.10	0905	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-027-SA5B-SB-4.0-5.0	12.15.10	1019	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-027-SA5B-SB-9.0-10.0	12.15.10	1025	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-027-SA5B-SB-4.5	12.15.10	1015	soil	none	5 Encore Samplers	X	X		X																				
SL-027-SA5B-SB-8.5	12.15.10	1023	soil	none	5 Encore Samplers	X	X		X																				
TB-121510	12.15.10	0800	water	HCl	3-40 mL VOA vials	X	X		X																				trip blank
EB03-SA5B-121510	12.15.10	1215	water	none	6-1 liter ambers			X						X	X			X	X										rinsate
EB03-SA5B-121510	12.15.10	1215	water	none	1-500 ml poly							X	X			X									X				rinsate
EB03-SA5B-121510	12.15.10	1215	water	HNO3	1-500 ml poly						X																		rinsate
EB15-SA5B-121510	12.15.10	1230	water	none	5-1 liter ambers			X						X	X			X	X										rinsate
EB15-SA5B-121510	12.15.10	1230	water	none	1-500 ml poly							X	X			X									X				rinsate
EB15-SA5B-121510	12.15.10	1230	water	HNO3	1-500 ml poly						X																		rinsate
EB15-SA5B-121510	12.15.10	1230	water	HCl	6-40 mL clear VOA vials	X	X																						rinsate
SL-132-SA5B-SS-0.0-0.5	12.15.10	1105	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-133-SA5B-SS-0.0-0.5	12.15.10	1055	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-131-SA5B-SS-0.0-0.5	12.15.10	1125	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-135-SA5B-SS-0.0-0.5	12.15.10	1113	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X									
SL-134-SA5B-SS-0.0-0.5	12.15.10	1055	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-298-SA5B-SB-4.0-5.0	12.15.10	1425	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-298-SA5B-SB-9.0-10.0	12.15.10	1435	soil	none	3 x 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	
SL-298-SA5B-SB-4.5	12.15.10	1420	soil	none	5 Encore Samplers	X	X		X																				
SL-298-SA5B-SB-9.5	12.15.10	1430	soil	none	5 Encore Samplers	X	X		X																				
SED-021-SIV-SD-0.0-0.5	12.15.10	0921	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SED-018-SIV-SD-0.0-0.5	12.15.10	1231	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
~~SED-019-SIV-SD-0.0-0.5~~	~~12.15.10~~	~~1153~~	~~soil~~	~~none~~	~~1 x 16 oz. jar & 1 6" sleeve~~			~~X~~			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		~~X~~	~~X~~									VOIDED
SED-016-SIV-SD-0.0-0.5	12.15.10	1341	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-153-SA5B-SS-0.0-0.5	12.15.10	1408	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-155-SA5B-SS-0.0-0.5	12.15.10	1341	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-149-SA5B-SS-0.0-0.5	12.15.10	1550	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-156-SA5B-SS-0.0-0.5	12.15.10	1332	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-150-SA5B-SS-0.0-0.5	12.15.10	1510	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X									
SL-181-SA5B-SS-0.0-0.5	12.15.10	1526	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-136-SA5B-SS-0.0-0.5	12.15.10	1350	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-203-SA5B-SS-0.0-0.5	12.15.10	1500	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-257-SA5B-SS-0.0-0.5	12.15.10	1325	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-204-SA5B-SS-0.0-0.5	12.15.10	1551	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-297-SA5B-4.0-5.0	12.15.10	1600	soil	none	3 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-297-SA5B-7.0-8.0	12.15.10	1606	soil	none	3 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-297-SA5B-4.5	12.15.10	1558	soil	none	5 Encore Samplers	X	X		X																				
SL-297-SA5B-7.5	12.15.10	1603	soil	none	5 Encore Samplers	X	X		X																				

Relinquished by: (Signature) — Date/Time: 12.15.10 | 1700 — Received for Laboratory by: (Signature) — Date/Time: 12/16/10 1000

Received by: (Signature) — Date/Time — Airbill No.: 00732892

Laboratory: Lancaster Laboratories, Inc.

No. of coolers = 6

SED-019-SIV-SD-0.0-0.5 was voided on 12/16/10 per PB.

NLM 12/30/10

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 01, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/16/2010
Group Number: 1225765
SDG: DX024
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-132-SA5B-SS-0.0-0.5 Grab Soil	6166113
SL-133-SA5B-SS-0.0-0.5 Grab Soil	6166114
SL-131-SA5B-SS-0.0-0.5 Grab Soil	6166115
SL-135-SA5B-SS-0.0-0.5 Grab Soil	6166116
SL-134-SA5B-SS-0.0-0.5 Grab Soil	6166117
SED-021-SIV-SD-0.0-0.5 Grab Soil	6166118
SED-018-SIV-SD-0.0-0.5 Grab Soil	6166119
SED-016-SIV-SD-0.0-0.5 Grab Soil	6166121
SL-153-SA5B-SS-0.0-0.5 Grab Soil	6166122
SL-155-SA5B-SS-0.0-0.5 Grab Soil	6166123
SL-149-SA5B-SS-0.0-0.5 Grab Soil	6166124
SL-156-SA5B-SS-0.0-0.5 Grab Soil	6166125
SL-150-SA5B-SS-0.0-0.5 Grab Soil	6166126
SL-181-SA5B-SS-0.0-0.5 Grab Soil	6166127
SL-136-SA5B-SS-0.0-0.5 Grab Soil	6166128
SL-203-SA5B-SS-0.0-0.5 Grab Soil	6166129
SL-257-SA5B-SS-0.0-0.5 Grab Soil	6166130
SL-204-SA5B-SS-0.0-0.5 Grab Soil	6166131

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC CDM Federal Services Program Attn: Todd Burgesser

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

COPY TO
1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Charles J. Neslund
Manager

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166113
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-132 SDG#: DX024-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166113
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-132 SDG#: DX024-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0517	JQ	0.0185	1.13	1
11031	12378-PeCDD	40321-76-4	0.325	JQ	0.0500	5.63	1
11031	123478-HxCDD	39227-28-6	0.574	JB	0.0409	5.63	1
11031	123678-HxCDD	57653-85-7	1.04	JBQ	0.0412	5.63	1
11031	123789-HxCDD	19408-74-3	0.775	JB	0.0358	5.63	1
11031	1234678-HpCDD	35822-46-9	23.9	B	0.0765	5.63	1
11031	OCDD	3268-87-9	234	B	0.0778	11.3	1
11031	2378-TCDF	51207-31-9	1.02	JB	0.0666	1.13	1
11031	12378-PeCDF	57117-41-6	0.337	JB	0.0609	5.63	1
11031	23478-PeCDF	57117-31-4	0.851	JB	0.0586	5.63	1
11031	123478-HxCDF	70648-26-9	0.469	JB	0.0358	5.63	1
11031	123678-HxCDF	57117-44-9	0.289	JBQ	0.0346	5.63	1
11031	123789-HxCDF	72918-21-9	0.180	JBQ	0.0318	5.63	1
11031	234678-HxCDF	60851-34-5	0.343	JB	0.0319	5.63	1
11031	1234678-HpCDF	67562-39-4	3.59	JB	0.0364	5.63	1
11031	1234789-HpCDF	55673-89-7	0.285	JB	0.0456	5.63	1
11031	OCDF	39001-02-0	11.4	B	0.0537	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	58	25 - 181
13C12-123478-HxCDD	54	32 - 141
13C12-123678-HxCDD	54	28 - 130
13C12-123789-HxCDD	62	28 - 130
13C12-1234678-HpCDD	51	23 - 140
13C12-OCDD	42	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	62	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	58	26 - 152
13C12-123678-HxCDF	57	26 - 123
13C12-234678-HxCDF	61	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	53	28 - 143
13C12-1234789-HpCDF	50	26 - 138
13C12-OCDF	35	17 - 157
13C12-1278-TCDD (CRS)	57	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166113
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-132 SDG#: DX024-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-132-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-132-SA5B-SS-0.0-0.5

LLI Sample # SW 6166113
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:05

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-132 SDG#: DX024-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 09:54	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166114
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-133 SDG#: DX024-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166114
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-133 SDG#: DX024-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.161	J	0.0282	1.07	1
11031	12378-PeCDD	40321-76-4	0.501	J	0.0472	5.36	1
11031	123478-HxCDD	39227-28-6	0.654	JB	0.0491	5.36	1
11031	123678-HxCDD	57653-85-7	1.27	JB	0.0542	5.36	1
11031	123789-HxCDD	19408-74-3	1.12	JB	0.0560	5.36	1
11031	1234678-HpCDD	35822-46-9	31.8	B	0.0843	5.36	1
11031	OCDD	3268-87-9	347	B	0.141	10.7	1
11031	2378-TCDF	51207-31-9	0.610	JB	0.0529	1.07	1
11031	12378-PeCDF	57117-41-6	0.182	JBQ	0.0458	5.36	1
11031	23478-PeCDF	57117-31-4	0.875	JB	0.0441	5.36	1
11031	123478-HxCDF	70648-26-9	0.438	JBQ	0.0380	5.36	1
11031	123678-HxCDF	57117-44-9	0.351	JB	0.0335	5.36	1
11031	123789-HxCDF	72918-21-9	0.233	JB	0.0492	5.36	1
11031	234678-HxCDF	60851-34-5	0.536	JB	0.0385	5.36	1
11031	1234678-HpCDF	67562-39-4	5.61	B	0.0569	5.36	1
11031	1234789-HpCDF	55673-89-7	0.593	JB	0.0779	5.36	1
11031	OCDF	39001-02-0	18.6	B	0.167	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	58	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	44	23 - 140
13C12-OCDD	23	17 - 157
13C12-2378-TCDF	81	24 - 169
13C12-12378-PeCDF	64	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	91	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	52	28 - 143
13C12-1234789-HpCDF	44	26 - 138
13C12-OCDF	18	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-133-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166114
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-133 SDG#: DX024-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-133-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-133-SA5B-SS-0.0-0.5

LLI Sample # SW 6166114
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-133 SDG#: DX024-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 08:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166115
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-131 SDG#: DX024-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166115
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-131 SDG#: DX024-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0653	JQ	0.0590	1.05	1
11031	12378-PeCDD	40321-76-4	0.537	JQ	0.0970	5.25	1
11031	123478-HxCDD	39227-28-6	0.966	JB	0.0958	5.25	1
11031	123678-HxCDD	57653-85-7	3.99	JB	0.0976	5.25	1
11031	123789-HxCDD	19408-74-3	2.38	JB	0.101	5.25	1
11031	1234678-HpCDD	35822-46-9	196	B	0.179	5.25	1
11031	OCDD	3268-87-9	3,130	B	0.298	10.5	1
11031	2378-TCDF	51207-31-9	0.209	JB	0.0565	1.05	1
11031	12378-PeCDF	57117-41-6	0.491	JB	0.0455	5.25	1
11031	23478-PeCDF	57117-31-4	0.730	JB	0.0430	5.25	1
11031	123478-HxCDF	70648-26-9	0.866	JB	0.0602	5.25	1
11031	123678-HxCDF	57117-44-9	0.815	JB	0.0570	5.25	1
11031	123789-HxCDF	72918-21-9	0.498	JB	0.0653	5.25	1
11031	234678-HxCDF	60851-34-5	0.893	JB	0.0574	5.25	1
11031	1234678-HpCDF	67562-39-4	11.1	B	0.0748	5.25	1
11031	1234789-HpCDF	55673-89-7	1.05	JB	0.0975	5.25	1
11031	OCDF	39001-02-0	27.9	B	0.172	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	55	23 - 140
13C12-OCDD	39	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	62	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	42	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166115
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-131 SDG#: DX024-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-131-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-131-SA5B-SS-0.0-0.5

LLI Sample # SW 6166115
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:25

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-131 SDG#: DX024-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 11:47	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166116
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-135 SDG#: DX024-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	10	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166116
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-135 SDG#: DX024-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.801	J	0.0541	1.11	1
11031	12378-PeCDD	40321-76-4	5.35	JQ	0.0884	5.56	1
11031	123478-HxCDD	39227-28-6	9.76	B	0.0659	5.56	1
11031	123678-HxCDD	57653-85-7	20.3	B	0.0699	5.56	1
11031	123789-HxCDD	19408-74-3	18.7	B	0.0690	5.56	1
11031	1234678-HpCDD	35822-46-9	555	B	0.248	5.56	1
11031	OCDD	3268-87-9	5,210	EB	0.209	11.1	1
11031	2378-TCDF	51207-31-9	0.896	JBQ	0.0782	1.11	1
11031	12378-PeCDF	57117-41-6	1.38	JB	0.0392	5.56	1
11031	23478-PeCDF	57117-31-4	1.74	JB	0.0354	5.56	1
11031	123478-HxCDF	70648-26-9	4.87	JB	0.0568	5.56	1
11031	123678-HxCDF	57117-44-9	4.26	JB	0.0537	5.56	1
11031	123789-HxCDF	72918-21-9	1.52	JB	0.0743	5.56	1
11031	234678-HxCDF	60851-34-5	5.26	JB	0.0554	5.56	1
11031	1234678-HpCDF	67562-39-4	106	B	0.0568	5.56	1
11031	1234789-HpCDF	55673-89-7	7.92	B	0.104	5.56	1
11031	OCDF	39001-02-0	296	B	0.129	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	51	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	53	26 - 138
13C12-OCDF	39	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-135-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166116
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-135 SDG#: DX024-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-135-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-135-SA5B-SS-0.0-0.5

LLI Sample # SW 6166116
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 11:13

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-135 SDG#: DX024-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 12:43	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166117
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-134 SDG#: DX024-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166117
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-134 SDG#: DX024-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.857	J	0.0557	1.05	1
11031	12378-PeCDD	40321-76-4	1.40	JQ	0.0638	5.26	1
11031	123478-HxCDD	39227-28-6	0.844	JB	0.0400	5.26	1
11031	123678-HxCDD	57653-85-7	2.10	JB	0.0408	5.26	1
11031	123789-HxCDD	19408-74-3	2.00	JB	0.0428	5.26	1
11031	1234678-HpCDD	35822-46-9	51.8	B	0.0742	5.26	1
11031	OCDD	3268-87-9	530	B	0.108	10.5	1
11031	2378-TCDF	51207-31-9	0.297	JB	0.0427	1.05	1
11031	12378-PeCDF	57117-41-6	0.359	JB	0.0229	5.26	1
11031	23478-PeCDF	57117-31-4	0.510	JB	0.0196	5.26	1
11031	123478-HxCDF	70648-26-9	0.547	JB	0.0277	5.26	1
11031	123678-HxCDF	57117-44-9	0.441	JB	0.0264	5.26	1
11031	123789-HxCDF	72918-21-9	0.184	JB	0.0322	5.26	1
11031	234678-HxCDF	60851-34-5	0.551	JB	0.0267	5.26	1
11031	1234678-HpCDF	67562-39-4	8.16	B	0.0351	5.26	1
11031	1234789-HpCDF	55673-89-7	0.685	JB	0.0493	5.26	1
11031	OCDF	39001-02-0	21.4	B	0.0538	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	64	23 - 140
13C12-OCDD	50	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	47	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166117
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-134 SDG#: DX024-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-134-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-134-SA5B-SS-0.0-0.5

LLI Sample # SW 6166117
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 10:55

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-134 SDG#: DX024-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 13:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166118
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-021 SDG#: DX024-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166118
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-021 SDG#: DX024-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0453	JQ	0.0253	1.05	1
11031	12378-PeCDD	40321-76-4	0.170	JQ	0.0409	5.27	1
11031	123478-HxCDD	39227-28-6	0.391	JBQ	0.0338	5.27	1
11031	123678-HxCDD	57653-85-7	2.24	JB	0.0351	5.27	1
11031	123789-HxCDD	19408-74-3	0.745	JB	0.0356	5.27	1
11031	1234678-HpCDD	35822-46-9	54.5	B	0.0612	5.27	1
11031	OCDD	3268-87-9	565	B	0.0753	10.5	1
11031	2378-TCDF	51207-31-9	0.0483	JB	0.0267	1.05	1
11031	12378-PeCDF	57117-41-6	0.192	JBQ	0.0148	5.27	1
11031	23478-PeCDF	57117-31-4	0.165	JBQ	0.0158	5.27	1
11031	123478-HxCDF	70648-26-9	0.324	JB	0.0297	5.27	1
11031	123678-HxCDF	57117-44-9	0.343	JB	0.0248	5.27	1
11031	123789-HxCDF	72918-21-9	0.0774	JBQ	0.0387	5.27	1
11031	234678-HxCDF	60851-34-5	0.513	JB	0.0278	5.27	1
11031	1234678-HpCDF	67562-39-4	9.15	B	0.0222	5.27	1
11031	1234789-HpCDF	55673-89-7	0.816	JB	0.0403	5.27	1
11031	OCDF	39001-02-0	21.0	B	0.0573	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	81	25 - 164
13C12-12378-PeCDD	92	25 - 181
13C12-123478-HxCDD	93	32 - 141
13C12-123678-HxCDD	92	28 - 130
13C12-123789-HxCDD	93	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	85	24 - 169
13C12-12378-PeCDF	103	24 - 185
13C12-23478-PeCDF	91	21 - 178
13C12-123478-HxCDF	89	26 - 152
13C12-123678-HxCDF	100	26 - 123
13C12-234678-HxCDF	91	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	110	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	90	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166118
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-021 SDG#: DX024-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-021-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-021-SIV-SD-0.0-0.5

LLI Sample # SW 6166118
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 09:21

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-021 SDG#: DX024-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 14:37	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402A	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166119
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-018 SDG#: DX024-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	9.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166119
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-018 SDG#: DX024-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0408	JQ	0.0180	1.11	1
11031	12378-PeCDD	40321-76-4	0.190	JQ	0.0296	5.55	1
11031	123478-HxCDD	39227-28-6	0.202	JBQ	0.0272	5.55	1
11031	123678-HxCDD	57653-85-7	0.619	JB	0.0290	5.55	1
11031	123789-HxCDD	19408-74-3	0.458	JBQ	0.0290	5.55	1
11031	1234678-HpCDD	35822-46-9	16.4	B	0.0518	5.55	1
11031	OCDD	3268-87-9	191	B	0.0605	11.1	1
11031	2378-TCDF	51207-31-9	0.128	JBQ	0.0342	1.11	1
11031	12378-PeCDF	57117-41-6	0.260	JB	0.0144	5.55	1
11031	23478-PeCDF	57117-31-4	0.461	JB	0.0156	5.55	1
11031	123478-HxCDF	70648-26-9	0.178	JB	0.0200	5.55	1
11031	123678-HxCDF	57117-44-9	0.196	JBQ	0.0169	5.55	1
11031	123789-HxCDF	72918-21-9	0.159	JBQ	0.0270	5.55	1
11031	234678-HxCDF	60851-34-5	0.249	JB	0.0191	5.55	1
11031	1234678-HpCDF	67562-39-4	2.93	JB	0.0183	5.55	1
11031	1234789-HpCDF	55673-89-7	0.205	JB	0.0358	5.55	1
11031	OCDF	39001-02-0	8.78	JB	0.0404	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	66	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	95	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	84	26 - 152
13C12-123678-HxCDF	96	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	103	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-018-SIV-SD-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166119
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-018 SDG#: DX024-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-018-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-018-SIV-SD-0.0-0.5

LLI Sample # SW 6166119
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 12:31

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-018 SDG#: DX024-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 15:33	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166121
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-016 SDG#: DX024-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	10.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166121
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-016 SDG#: DX024-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.120	JQ	0.0287	1.12	1
11031	12378-PeCDD	40321-76-4	0.820	JQ	0.0609	5.58	1
11031	123478-HxCDD	39227-28-6	2.18	JB	0.0487	5.58	1
11031	123678-HxCDD	57653-85-7	20.7	B	0.0510	5.58	1
11031	123789-HxCDD	19408-74-3	5.06	JB	0.0494	5.58	1
11031	1234678-HpCDD	35822-46-9	735	B	0.202	5.58	1
11031	OCDD	3268-87-9	7,800	EB	0.194	11.2	1
11031	2378-TCDF	51207-31-9	0.0902	JBQ	0.0305	1.12	1
11031	12378-PeCDF	57117-41-6	0.363	JBQ	0.0208	5.58	1
11031	23478-PeCDF	57117-31-4	0.247	JBQ	0.0225	5.58	1
11031	123478-HxCDF	70648-26-9	2.42	JB	0.0539	5.58	1
11031	123678-HxCDF	57117-44-9	2.82	JB	0.0451	5.58	1
11031	123789-HxCDF	72918-21-9	0.495	JBQ	0.0674	5.58	1
11031	234678-HxCDF	60851-34-5	4.66	JB	0.0528	5.58	1
11031	1234678-HpCDF	67562-39-4	75.4	B	0.0434	5.58	1
11031	1234789-HpCDF	55673-89-7	11.7	B	0.0828	5.58	1
11031	OCDF	39001-02-0	177	B	0.0675	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	65	23 - 140
13C12-OCDD	57	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	60	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	53	26 - 138
13C12-OCDF	43	17 - 157
13C12-1278-TCDD (CRS)	68	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-016-SIV-SD-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166121
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-016 SDG#: DX024-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-016-SIV-SD-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SED-016-SIV-SD-0.0-0.5

LLI Sample # SW 6166121
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-016 SDG#: DX024-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 16:30	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166122
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-153 SDG#: DX024-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	13.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166122
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-153 SDG#: DX024-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.161	JQ	0.0212	1.15	1
11031	12378-PeCDD	40321-76-4	1.14	J	0.0453	5.76	1
11031	123478-HxCDD	39227-28-6	2.53	JB	0.0281	5.76	1
11031	123678-HxCDD	57653-85-7	6.16	B	0.0295	5.76	1
11031	123789-HxCDD	19408-74-3	5.44	JB	0.0291	5.76	1
11031	1234678-HpCDD	35822-46-9	165	B	0.0942	5.76	1
11031	OCDD	3268-87-9	2,010	B	0.106	11.5	1
11031	2378-TCDF	51207-31-9	0.461	JB	0.0440	1.15	1
11031	12378-PeCDF	57117-41-6	0.628	JB	0.0189	5.76	1
11031	23478-PeCDF	57117-31-4	0.920	JB	0.0179	5.76	1
11031	123478-HxCDF	70648-26-9	1.47	JB	0.0273	5.76	1
11031	123678-HxCDF	57117-44-9	1.38	JB	0.0259	5.76	1
11031	123789-HxCDF	72918-21-9	0.874	JB	0.0302	5.76	1
11031	234678-HxCDF	60851-34-5	1.83	JB	0.0266	5.76	1
11031	1234678-HpCDF	67562-39-4	29.0	B	0.0406	5.76	1
11031	1234789-HpCDF	55673-89-7	2.02	JB	0.0501	5.76	1
11031	OCDF	39001-02-0	67.9	B	0.0309	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-153-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166122
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-153 SDG#: DX024-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-153-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-153-SA5B-SS-0.0-0.5

LLI Sample # SW 6166122
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 14:08

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-153 SDG#: DX024-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 17:26	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166123
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-155 SDG#: DX024-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166123
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-155 SDG#: DX024-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0159	U	0.0159	1.04	1
11031	12378-PeCDD	40321-76-4	0.0276	U	0.0276	5.22	1
11031	123478-HxCDD	39227-28-6	0.182	JBQ	0.0239	5.22	1
11031	123678-HxCDD	57653-85-7	1.24	JB	0.0245	5.22	1
11031	123789-HxCDD	19408-74-3	1.22	JB	0.0247	5.22	1
11031	1234678-HpCDD	35822-46-9	25.2	B	0.0416	5.22	1
11031	OCDD	3268-87-9	313	B	0.0505	10.4	1
11031	2378-TCDF	51207-31-9	0.137	JBQ	0.0253	1.04	1
11031	12378-PeCDF	57117-41-6	0.298	JB	0.0117	5.22	1
11031	23478-PeCDF	57117-31-4	0.275	JB	0.0123	5.22	1
11031	123478-HxCDF	70648-26-9	0.202	JB	0.0182	5.22	1
11031	123678-HxCDF	57117-44-9	0.234	JBQ	0.0159	5.22	1
11031	123789-HxCDF	72918-21-9	0.391	JB	0.0249	5.22	1
11031	234678-HxCDF	60851-34-5	0.262	JBQ	0.0182	5.22	1
11031	1234678-HpCDF	67562-39-4	2.35	JB	0.0169	5.22	1
11031	1234789-HpCDF	55673-89-7	0.222	JBQ	0.0307	5.22	1
11031	OCDF	39001-02-0	4.59	JB	0.0307	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	63	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	52	17 - 157
13C12-1278-TCDD (CRS)	74	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-155-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166123
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-155 SDG#: DX024-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-155-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-155-SA5B-SS-0.0-0.5

LLI Sample # SW 6166123
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:41

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-155 SDG#: DX024-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 18:23	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166124
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-149 SDG#: DX024-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166124
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-149 SDG#: DX024-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0659	J	0.0201	1.04	1
11031	12378-PeCDD	40321-76-4	0.461	J	0.0416	5.22	1
11031	123478-HxCDD	39227-28-6	0.921	JB	0.0276	5.22	1
11031	123678-HxCDD	57653-85-7	2.52	JB	0.0283	5.22	1
11031	123789-HxCDD	19408-74-3	2.03	JB	0.0285	5.22	1
11031	1234678-HpCDD	35822-46-9	68.7	B	0.0693	5.22	1
11031	OCDD	3268-87-9	737	B	0.0858	10.4	1
11031	2378-TCDF	51207-31-9	0.282	JB	0.0410	1.04	1
11031	12378-PeCDF	57117-41-6	0.869	JB	0.0192	5.22	1
11031	23478-PeCDF	57117-31-4	0.589	JB	0.0176	5.22	1
11031	123478-HxCDF	70648-26-9	0.752	JB	0.0233	5.22	1
11031	123678-HxCDF	57117-44-9	0.861	JB	0.0221	5.22	1
11031	123789-HxCDF	72918-21-9	0.281	JB	0.0259	5.22	1
11031	234678-HxCDF	60851-34-5	0.883	JB	0.0227	5.22	1
11031	1234678-HpCDF	67562-39-4	15.7	B	0.0308	5.22	1
11031	1234789-HpCDF	55673-89-7	1.16	JB	0.0384	5.22	1
11031	OCDF	39001-02-0	39.9	B	0.0362	10.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	51	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	71	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	54	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-149-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166124
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-149 SDG#: DX024-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-149-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-149-SA5B-SS-0.0-0.5

LLI Sample # SW 6166124
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:50

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-149 SDG#: DX024-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 22:22	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166125
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-156 SDG#: DX024-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166125
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-156 SDG#: DX024-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.139	J	0.0258	1.07	1
11031	12378-PeCDD	40321-76-4	1.43	J	0.0652	5.37	1
11031	123478-HxCDD	39227-28-6	2.84	JB	0.0410	5.37	1
11031	123678-HxCDD	57653-85-7	7.38	B	0.0425	5.37	1
11031	123789-HxCDD	19408-74-3	5.11	JB	0.0429	5.37	1
11031	1234678-HpCDD	35822-46-9	183	B	0.117	5.37	1
11031	OCDD	3268-87-9	1,910	B	0.120	10.7	1
11031	2378-TCDF	51207-31-9	0.573	JB	0.0707	1.07	1
11031	12378-PeCDF	57117-41-6	0.693	JB	0.0260	5.37	1
11031	23478-PeCDF	57117-31-4	1.51	JB	0.0253	5.37	1
11031	123478-HxCDF	70648-26-9	1.85	JB	0.0364	5.37	1
11031	123678-HxCDF	57117-44-9	2.20	JB	0.0331	5.37	1
11031	123789-HxCDF	72918-21-9	0.686	JB	0.0454	5.37	1
11031	234678-HxCDF	60851-34-5	2.25	JB	0.0352	5.37	1
11031	1234678-HpCDF	67562-39-4	20.1	B	0.0287	5.37	1
11031	1234789-HpCDF	55673-89-7	2.99	JB	0.0456	5.37	1
11031	OCDF	39001-02-0	34.6	B	0.0524	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	56	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-156-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166125
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-156 SDG#: DX024-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-156-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-156-SA5B-SS-0.0-0.5

LLI Sample # SW 6166125
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:32

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-156 SDG#: DX024-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/19/2011 23:19	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166126
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-150 SDG#: DX024-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166126
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-150 SDG#: DX024-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0833	J	0.0218	1.05	1
11031	12378-PeCDD	40321-76-4	0.697	J	0.0474	5.26	1
11031	123478-HxCDD	39227-28-6	1.94	JB	0.0326	5.26	1
11031	123678-HxCDD	57653-85-7	5.41	B	0.0337	5.26	1
11031	123789-HxCDD	19408-74-3	4.07	JB	0.0346	5.26	1
11031	1234678-HpCDD	35822-46-9	192	B	0.105	5.26	1
11031	OCDD	3268-87-9	2,320	B	0.111	10.5	1
11031	2378-TCDF	51207-31-9	0.277	JBQ	0.0367	1.05	1
11031	12378-PeCDF	57117-41-6	0.671	JB	0.0184	5.26	1
11031	23478-PeCDF	57117-31-4	0.708	JB	0.0169	5.26	1
11031	123478-HxCDF	70648-26-9	2.39	JB	0.0295	5.26	1
11031	123678-HxCDF	57117-44-9	2.60	JB	0.0283	5.26	1
11031	123789-HxCDF	72918-21-9	0.444	JB	0.0352	5.26	1
11031	234678-HxCDF	60851-34-5	3.13	JB	0.0294	5.26	1
11031	1234678-HpCDF	67562-39-4	79.8	B	0.0446	5.26	1
11031	1234789-HpCDF	55673-89-7	5.53	B	0.0586	5.26	1
11031	OCDF	39001-02-0	265	B	0.0491	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	56	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-150-SA5B-SS-0.0-0.5 Grab Soil**
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166126
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-150 SDG#: DX024-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-150-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-150-SA5B-SS-0.0-0.5

LLI Sample # SW 6166126
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:10

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-150 SDG#: DX024-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 00:15	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166127
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-181 SDG#: DX024-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166127
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-181 SDG#: DX024-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0500	U	0.0500	1.09	1
11031	12378-PeCDD	40321-76-4	0.540	J	0.0871	5.43	1
11031	123478-HxCDD	39227-28-6	0.801	JB	0.0858	5.43	1
11031	123678-HxCDD	57653-85-7	2.90	JB	0.0821	5.43	1
11031	123789-HxCDD	19408-74-3	2.08	JB	0.0747	5.43	1
11031	1234678-HpCDD	35822-46-9	72.0	B	0.136	5.43	1
11031	OCDD	3268-87-9	1,300	B	0.178	10.9	1
11031	2378-TCDF	51207-31-9	0.195	JB	0.0563	1.09	1
11031	12378-PeCDF	57117-41-6	0.203	JB	0.0250	5.43	1
11031	23478-PeCDF	57117-31-4	0.483	JBQ	0.0310	5.43	1
11031	123478-HxCDF	70648-26-9	0.488	JB	0.0523	5.43	1
11031	123678-HxCDF	57117-44-9	0.383	JB	0.0526	5.43	1
11031	123789-HxCDF	72918-21-9	0.603	JBQ	0.0725	5.43	1
11031	234678-HxCDF	60851-34-5	0.448	JB	0.0577	5.43	1
11031	1234678-HpCDF	67562-39-4	7.79	B	0.0539	5.43	1
11031	1234789-HpCDF	55673-89-7	0.686	JB	0.0711	5.43	1
11031	OCDF	39001-02-0	22.0	B	0.124	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	64	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	48	23 - 140
13C12-OCDD	30	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	35	29 - 147
13C12-1234678-HpCDF	53	28 - 143
13C12-1234789-HpCDF	50	26 - 138
13C12-OCDF	32	17 - 157
13C12-1278-TCDD (CRS)	70	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166127
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-181 SDG#: DX024-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-181-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-181-SA5B-SS-0.0-0.5

LLI Sample # SW 6166127
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:26

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-181 SDG#: DX024-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 09:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166128
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-136 SDG#: DX024-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166128
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-136 SDG#: DX024-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0729	JQ	0.0359	1.10	1
11031	12378-PeCDD	40321-76-4	0.719	J	0.0604	5.48	1
11031	123478-HxCDD	39227-28-6	1.24	JB	0.0393	5.48	1
11031	123678-HxCDD	57653-85-7	4.26	JB	0.0409	5.48	1
11031	123789-HxCDD	19408-74-3	3.05	JB	0.0416	5.48	1
11031	1234678-HpCDD	35822-46-9	119	B	0.118	5.48	1
11031	OCDD	3268-87-9	1,640	B	0.149	11.0	1
11031	2378-TCDF	51207-31-9	0.791	JB	0.0660	1.10	1
11031	12378-PeCDF	57117-41-6	0.789	JB	0.0332	5.48	1
11031	23478-PeCDF	57117-31-4	1.82	JB	0.0305	5.48	1
11031	123478-HxCDF	70648-26-9	1.20	JB	0.0394	5.48	1
11031	123678-HxCDF	57117-44-9	1.08	JB	0.0395	5.48	1
11031	123789-HxCDF	72918-21-9	0.794	JB	0.0438	5.48	1
11031	234678-HxCDF	60851-34-5	1.18	JB	0.0380	5.48	1
11031	1234678-HpCDF	67562-39-4	14.8	B	0.0457	5.48	1
11031	1234789-HpCDF	55673-89-7	1.32	JB	0.0581	5.48	1
11031	OCDF	39001-02-0	40.3	B	0.0489	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	48	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	69	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166128
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-136 SDG#: DX024-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-136-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-136-SA5B-SS-0.0-0.5

LLI Sample # SW 6166128
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:50

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-136 SDG#: DX024-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 02:08	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166129
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-203 SDG#: DX024-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166129
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-203 SDG#: DX024-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0484	JQ	0.0193	1.09	1
11031	12378-PeCDD	40321-76-4	0.166	J	0.0367	5.45	1
11031	123478-HxCDD	39227-28-6	0.238	JB	0.0346	5.45	1
11031	123678-HxCDD	57653-85-7	0.760	JB	0.0369	5.45	1
11031	123789-HxCDD	19408-74-3	0.655	JB	0.0406	5.45	1
11031	1234678-HpCDD	35822-46-9	22.3	B	0.0656	5.45	1
11031	OCDD	3268-87-9	312	B	0.0676	10.9	1
11031	2378-TCDF	51207-31-9	0.0825	JBQ	0.0284	1.09	1
11031	12378-PeCDF	57117-41-6	0.483	JB	0.0167	5.45	1
11031	23478-PeCDF	57117-31-4	0.197	JB	0.0172	5.45	1
11031	123478-HxCDF	70648-26-9	0.271	JBQ	0.0314	5.45	1
11031	123678-HxCDF	57117-44-9	0.240	JBQ	0.0263	5.45	1
11031	123789-HxCDF	72918-21-9	0.199	JB	0.0358	5.45	1
11031	234678-HxCDF	60851-34-5	0.238	JB	0.0300	5.45	1
11031	1234678-HpCDF	67562-39-4	2.73	JB	0.0266	5.45	1
11031	1234789-HpCDF	55673-89-7	0.292	JBQ	0.0461	5.45	1
11031	OCDF	39001-02-0	6.06	JB	0.0520	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	66	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	73	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166129
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-203 SDG#: DX024-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-203-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-203-SA5B-SS-0.0-0.5

LLI Sample # SW 6166129
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:00

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-203 SDG#: DX024-17

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 03:05	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166130
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-257 SDG#: DX024-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	10.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166130
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-257 SDG#: DX024-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.106	JQ	0.0169	1.11	1
11031	12378-PeCDD	40321-76-4	0.851	J	0.0441	5.56	1
11031	123478-HxCDD	39227-28-6	1.63	JB	0.0314	5.56	1
11031	123678-HxCDD	57653-85-7	4.40	JB	0.0324	5.56	1
11031	123789-HxCDD	19408-74-3	3.15	JB	0.0317	5.56	1
11031	1234678-HpCDD	35822-46-9	160	B	0.0958	5.56	1
11031	OCDD	3268-87-9	1,870	B	0.0841	11.1	1
11031	2378-TCDF	51207-31-9	0.367	JB	0.0377	1.11	1
11031	12378-PeCDF	57117-41-6	0.723	JB	0.0178	5.56	1
11031	23478-PeCDF	57117-31-4	0.980	JB	0.0172	5.56	1
11031	123478-HxCDF	70648-26-9	1.77	JB	0.0272	5.56	1
11031	123678-HxCDF	57117-44-9	1.16	JB	0.0257	5.56	1
11031	123789-HxCDF	72918-21-9	0.863	JB	0.0294	5.56	1
11031	234678-HxCDF	60851-34-5	1.38	JB	0.0262	5.56	1
11031	1234678-HpCDF	67562-39-4	21.4	B	0.0292	5.56	1
11031	1234789-HpCDF	55673-89-7	1.86	JB	0.0383	5.56	1
11031	OCDF	39001-02-0	43.4	B	0.0338	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	85	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	82	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	65	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166130
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-257 SDG#: DX024-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-257-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-257-SA5B-SS-0.0-0.5

LLI Sample # SW 6166130
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 13:25

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-257 SDG#: DX024-18

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 04:01	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166131
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-204 SDG#: DX024-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166131
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-204 SDG#: DX024-19*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0302	JQ	0.0183	1.07	1
11031	12378-PeCDD	40321-76-4	0.181	JQ	0.0285	5.36	1
11031	123478-HxCDD	39227-28-6	0.204	JB	0.0250	5.36	1
11031	123678-HxCDD	57653-85-7	0.724	JB	0.0290	5.36	1
11031	123789-HxCDD	19408-74-3	0.554	JBQ	0.0272	5.36	1
11031	1234678-HpCDD	35822-46-9	15.6	B	0.0439	5.36	1
11031	OCDD	3268-87-9	179	B	0.0581	10.7	1
11031	2378-TCDF	51207-31-9	0.0681	JB	0.0188	1.07	1
11031	12378-PeCDF	57117-41-6	0.138	JB	0.0140	5.36	1
11031	23478-PeCDF	57117-31-4	0.260	JB	0.0130	5.36	1
11031	123478-HxCDF	70648-26-9	0.173	JBQ	0.0188	5.36	1
11031	123678-HxCDF	57117-44-9	0.226	JBQ	0.0185	5.36	1
11031	123789-HxCDF	72918-21-9	0.116	JB	0.0212	5.36	1
11031	234678-HxCDF	60851-34-5	0.247	JB	0.0179	5.36	1
11031	1234678-HpCDF	67562-39-4	3.15	JB	0.0283	5.36	1
11031	1234789-HpCDF	55673-89-7	0.265	JBQ	0.0347	5.36	1
11031	OCDF	39001-02-0	10.0	JB	0.0374	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	59	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	59	23 - 140
13C12-OCDD	46	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	64	28 - 143
13C12-1234789-HpCDF	62	26 - 138
13C12-OCDF	49	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166131
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-204 SDG#: DX024-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-204-SA5B-SS-0.0-0.5 Grab Soil
SSFL Area IV Collocated Soil Sampling
SL-204-SA5B-SS-0.0-0.5

LLI Sample # SW 6166131
LLI Group # 1225765
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/15/2010 15:51

Submitted: 12/16/2010 10:00
Reported: 02/01/2011 23:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D-204 SDG#: DX024-19*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11006001	01/20/2011 04:58	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11006001	01/06/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10356162402B	12/22/2010 20:17	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225765
Reported: 02/01/11 at 11:46 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10356162402A	Sample number(s): 6166113-6166118								
28a Moisture Content by 160.3					100		80-120		
Batch number: 10356162402B	Sample number(s): 6166119,6166121-6166131								
28a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11006001	Sample number(s): 6166113-6166119,6166121-6166131								
2378-TCDD	0.0130 U	0.0130	1.00	ng/kg	90		67-158		
12378-PeCDD	0.0207 U	0.0207	5.00	ng/kg	92		70-142		
123478-HxCDD	0.0156 J	0.0121	5.00	ng/kg	92		70-164		
123678-HxCDD	0.0249 J	0.0126	5.00	ng/kg	91		76-134		
123789-HxCDD	0.0161 J	0.0117	5.00	ng/kg	93		64-162		
1234678-HpCDD	0.118 J	0.0195	5.00	ng/kg	91		70-140		
OCDD	0.366 J	0.0243	10.0	ng/kg	90		78-144		
2378-TCDF	0.0160 J	0.0138	1.00	ng/kg	102		75-158		
12378-PeCDF	0.0239 J	0.00990	5.00	ng/kg	92		80-134		
23478-PeCDF	0.0586 J	0.00860	5.00	ng/kg	91		68-160		
123478-HxCDF	0.0698 J	0.0117	5.00	ng/kg	87		72-134		
123678-HxCDF	0.0377 J	0.0106	5.00	ng/kg	86		84-130		
123789-HxCDF	0.0373 J	0.0134	5.00	ng/kg	90		78-130		
234678-HxCDF	0.0505 J	0.0104	5.00	ng/kg	87		70-156		
1234678-HpCDF	0.117 J	0.0121	5.00	ng/kg	87		82-122		
1234789-HpCDF	0.0646 J	0.0225	5.00	ng/kg	90		78-138		
OCDF	0.220 J	0.0263	10.0	ng/kg	90		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10356162402A	Sample number(s): 6166113-6166118					BKG: P166079			
28a Moisture Content by 160.3						5.1	5.2	2	20
Batch number: 10356162402B	Sample number(s): 6166119,6166121-6166131					BKG: P166080			
28a Moisture Content by 160.3						9.9	9.5	4	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225765
Reported: 02/01/11 at 11:46 PM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11006001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6166113	70	58	58	57	61	68
6166114	75	62	91	85	84	75
6166115	64	68	77	76	75	73
6166116	73	75	79	78	77	67
6166117	72	82	80	79	79	75
6166118	81	91	89	100	91	78
6166119	75	85	84	96	84	72
6166121	60	67	67	76	67	60
6166122	70	79	80	79	78	79
6166123	65	77	74	83	72	64
6166124	67	78	79	77	77	76
6166125	68	76	76	81	76	69
6166126	70	80	78	78	77	76
6166127	65	62	69	68	67	35
6166128	71	76	79	77	78	78
6166129	67	70	71	80	71	69
6166130	76	84	85	85	85	84
6166131	64	70	73	73	72	69
Blank	69	70	67	71	71	65
OPR	68	69	69	84	72	59
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6166113	53	50	35	57	58	54
6166114	52	44	18	83	58	80
6166115	62	58	42	73	65	71
6166116	78	53	39	81	74	75
6166117	70	60	47	79	77	76
6166118	110	72	58	90	92	93
6166119	103	64	51	86	84	87
6166121	84	53	43	68	67	72
6166122	76	74	61	81	74	76
6166123	93	62	52	74	76	77
6166124	71	66	54	77	73	76
6166125	81	63	51	80	74	77
6166126	72	69	58	79	75	76
6166127	53	50	32	70	62	64
6166128	69	66	51	79	72	77
6166129	91	67	55	73	71	74
6166130	82	77	65	83	71	82
6166131	64	62	49	71	67	70
Blank	95	62	55	78	75	78
OPR	97	53	45	78	74	79
Limits:	28-143	26-138	17-157	35-197	25-181	32-141

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225765
Reported: 02/01/11 at 11:46 PM

Surrogate Quality Control

	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6166113	54	62	51	42	69	62
6166114	79	74	44	23	81	64
6166115	69	68	55	39	71	67
6166116	74	73	63	51	77	72
6166117	74	75	64	50	80	79
6166118	92	93	86	72	85	103
6166119	86	85	79	66	80	95
6166121	69	69	65	57	62	75
6166122	75	73	71	58	76	78
6166123	77	76	72	63	68	84
6166124	73	72	63	51	74	76
6166125	76	75	68	56	72	79
6166126	75	74	67	56	76	79
6166127	64	63	48	30	68	60
6166128	74	72	63	48	76	74
6166129	73	66	74	62	69	75
6166130	83	81	76	65	82	85
6166131	59	63	59	46	69	68
Blank	75	78	77	72	64	67
OPR	78	77	75	65	66	81
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1225765 6166 113-31

CHAIN OF CUSTODY RECORD

CDM | SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure DR and DKP

Samplers: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-ER EPA 8015B Mod.	*Metals EPA 6010/6020/7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-303-SA5B-SS-0.0-0.5	12.15.10	0940	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-262-SA5B-SS-0.0-0.5MS	12.15.10	0925	soil	none	2 x 16 oz. Jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X										MS/MSD
SL-302-SA5B-SS-0.0-0.5	12.15.10	0949	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
DUP06-SA5B-QC-121510	12.15.10	0935	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										DUP
SL-263-SA5B-SS-0.0-0.5	12.15.10	0907	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-264-SA5B-SS-0.0-0.5	12.15.10	0905	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-027-SA5B-SB-4.0-5.0	12.15.10	1019	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-027-SA5B-SB-9.0-10.0	12.15.10	1025	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-027-SA5B-SB-4.5	12.15.10	1015	soil	none	5 Encore Samplers	X	X		X																				
SL-027-SA5B-SB-8.5	12.15.10	1023	soil	none	5 Encore Samplers	X	X		X																				
TB-121510	12.15.10	0800	water	HCl	3-40 mL VOA vials	X	X		X																				trip blank
EB03-SA5B-121510	12.15.10	1215	water	none	6-1 liter ambers			X						X	X			X	X										rinsate
EB03-SA5B-121510	12.15.10	1215	water	none	1-500 ml poly							X	X			X										X			rinsate
EB03-SA5B-121510	12.15.10	1215	water	HNO3	1-500 ml poly						X																		rinsate
EB15-SA5B-121510	12.15.10	1230	water	none	5-1 liter ambers			X						X	X			X	X										rinsate
EB15-SA5B-121510	12.15.10	1230	water	none	1-500 ml poly							X	X			X										X			rinsate
EB15-SA5B-121510	12.15.10	1230	water	HNO3	1-500 ml poly						X																		rinsate
EB15-SA5B-121510	12.15.10	1230	water	HCl	6-40 mL clear VOA vials	X	X																						rinsate
SL-132-SA5B-SS-0.0-0.5	12.15.10	1105	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-133-SA5B-SS-0.0-0.5	12.15.10	1055	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-131-SA5B-SS-0.0-0.5	12.15.10	1125	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-135-SA5B-SS-0.0-0.5	12.15.10	1113	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-134-SA5B-SS-0.0-0.5	12.15.10	1055	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-298-SA5B-SB-4.0-5.0	12.15.10	1425	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-298-SA5B-SB-9.0-10.0	12.15.10	1435	soil	none	3 x 4 oz. Jars & 3 16 oz. Jars			X		X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	
SL-298-SA5B-SB-4.5	12.15.10	1420	soil	none	5 Encore Samplers	X	X		X																				
SL-298-SA5B-SB-9.5	12.15.10	1430	soil	none	5 Encore Samplers	X	X		X																				
SED-021-SIV-SD-0.0-0.5	12.15.10	0921	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-018-SIV-SD-0.0-0.5	12.15.10	1231	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
~~SED-019-SIV-SD-0.0-0.5~~	~~12.15.10~~	~~1153~~	~~soil~~	~~none~~	~~1 x 16 oz. Jar & 1 6" sleeve~~			~~X~~			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		~~X~~	~~X~~										VOIDED
SED-016-SIV-SD-0.0-0.5	12.15.10	1341	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-153-SA5B-SS-0.0-0.5	12.15.10	1408	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-155-SA5B-SS-0.0-0.5	12.15.10	1341	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-149-SA5B-SS-0.0-0.5	12.15.10	1550	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-156-SA5B-SS-0.0-0.5	12.15.10	1332	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-150-SA5B-SS-0.0-0.5	12.15.10	1510	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-181-SA5B-SS-0.0-0.5	12.15.10	1526	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-136-SA5B-SS-0.0-0.5	12.15.10	1350	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-203-SA5B-SS-0.0-0.5	12.15.10	1500	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-257-SA5B-SS-0.0-0.5	12.15.10	1325	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-204-SA5B-SS-0.0-0.5	12.15.10	1551	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-297-SA5B-4.0-5.0	12.15.10	1600	soil	none	3 4 oz. Jars & 3 16 oz. Jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-297-SA5B-7.0-8.0	12.15.10	1606	soil	none	3 4 oz. Jars & 3 16 oz. Jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-297-SA5B-4.5	12.15.10	1558	soil	none	5 Encore Samplers	X	X		X																				
SL-297-SA5B-7.5	12.15.10	1603	soil	none	5 Encore Samplers	X	X		X																				

Relinquished by: (Signature) | Date/Time 12.15.10 1700 | Received for Laboratory by: (Signature) | Date/Time 12/16/10 1000

Received by: (Signature) | Date/Time | Airbill No. 007882892

Laboratory: Lancaster Laboratories, Inc.

No. of coolers = 6

SED-019-SIV-SD-0.0-0.5 was voided on 12/16/10 per PB.
NLM 12/30/10

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 03, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/17/2010
Group Number: 1225974
SDG: DE042
PO Number: 1203-004-007-AL
Release Number: Tracking #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SED-011-SIV-SD-0.0-0.5 Soil	6167468
SED-013-SIV-SD-0.0-0.5 Soil	6167469
SED-017-SIV-SD-0.0-0.5 Soil	6167470
SED-019-SIV-SD-0.0-0.5 Soil	6167471
SED-020-SIV-SD-0.0-0.5 Soil	6167472
SL-147-SA5B-SS-0.0-0.5 Soil	6167473
SL-169-SA5B-SS-0.0-0.5 Soil	6167474
SL-172-SA5B-SS-0.0-0.5 Soil	6167475
SL-173-SA5B-SS-0.0-0.5 Soil	6167476
SL-176-SA5B-SS-0.0-0.5 Soil	6167477
SL-178-SA5B-SS-0.0-0.5 Soil	6167478
SL-186-SA5B-SS-0.0-0.5 Soil	6167479
SL-187-SA5B-SS-0.0-0.5 Soil	6167480
SL-189-SA5B-SS-0.0-0.5 Soil	6167481
SL-189-SA5B-SS-0.0-0.5MS Soil	6167482
SL-189-SA5B-SS-0.0-0.5MSD Soil	6167483
SL-189-SA5B-SS-0.0-0.5DUP Soil	6167484
SL-192-SA5B-SS-0.0-0.5 Soil	6167485
SL-194-SA5B-SS-0.0-0.5 Soil	6167486
SL-196-SA5B-SS-0.0-0.5 Soil	6167487
SL-198-SA5B-SS-0.0-0.5 Soil	6167488
SL-199-SA5B-SS-0.0-0.5 Soil	6167489
SL-202-SA5B-SS-0.0-0.5 Soil	6167490

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

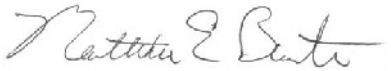
Analysis Report

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	CDM Federal Services Program	Attn: Todd Burgesser
1 COPY TO	Data Package Group	

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Matthew E. Barton
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-011-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD011 SDG#: DE042-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzoic acid	65-85-0	180	U	180	550	1
04688	Benzyl alcohol	100-51-6	180	U	180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180	1
04688	4-Chloroaniline	106-47-8	74	U	74	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
04688	2,4-Dinitrophenol	51-28-5	740	U	740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	95	J	18	370	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	74	U	74	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	37	U	37	180	1
04688	4-Methylphenol	106-44-5	37	U	37	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	37	U	37	180	1
04688	4-Nitroaniline	100-01-6	74	U	74	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	550	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-011-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD011 SDG#: DE042-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.74	U	0.74	1.8	1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.8	1
10138	Anthracene	120-12-7	0.40	J	0.37	1.8	1
10138	Benzo(a)anthracene	56-55-3	1.5	J	0.74	1.8	1
10138	Benzo(a)pyrene	50-32-8	2.0		0.74	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	3.7		0.74	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	1.6	J	0.74	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	1.1	J	0.74	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.6	U	6.6	20	1
10138	Di-n-butylphthalate	84-74-2	6.6	U	6.6	20	1
10138	Chrysene	218-01-9	2.7		0.37	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.74	U	0.74	1.8	1
10138	Diethylphthalate	84-66-2	6.6	U	6.6	20	1
10138	Dimethylphthalate	131-11-3	6.6	U	6.6	20	1
10138	Fluoranthene	206-44-0	4.0		0.74	1.8	1
10138	Fluorene	86-73-7	0.74	U	0.74	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.2	J	0.74	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.74	U	0.74	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.74	U	0.74	1.8	1
10138	Naphthalene	91-20-3	1.5	J	0.74	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.74	U	0.74	1.8	1
10138	Di-n-octylphthalate	117-84-0	8.6	J	6.6	20	1
10138	Phenanthrene	85-01-8	2.5		0.74	1.8	1
10138	Pyrene	129-00-0	3.7		0.74	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.9	J	1.3	4.0	1
10401	Dalapon	75-99-0	4.9	U	4.9	9.9	1
10401	2,4-DB	94-82-6	8.9	U	8.9	8.9	1
10401	Dicamba	1918-00-9	0.59	J	0.44	1.3	1
10401	Dinoseb	88-85-7	0.88	U	0.88	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.88	U	0.88	1.9	1
10401	MCPA	94-74-6	84	U	84	280	1
10401	MCPP (Mecoprop)	93-65-2	83	U	83	280	1
10401	2,4,5-T	93-76-5	0.090	U	0.090	0.19	1
10401	2,4,5-TP	93-72-1	0.083	U	0.083	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SED-011-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD011 SDG#: DE042-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.3	U	2.3	5.5	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.15	U	0.15	0.18	1
01363	Alpha BHC	319-84-6	1.2		0.037	0.18	1
01363	Beta BHC	319-85-7	0.066	U	0.066	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.11	U	0.11	0.18	1
01363	Chlordane	57-74-9	5.0	U	5.0	5.0	1
01363	p,p-DDD	72-54-8	0.073	U	0.073	0.37	1
01363	p,p-DDE	72-55-9	1.4	U	1.4	1.4	1
01363	p,p-DDT	50-29-3	1.2	U	1.2	1.2	1
01363	Delta BHC	319-86-8	0.27		0.040	0.18	1
01363	Dieldrin	60-57-1	0.073	U	0.073	0.37	1
01363	Endosulfan I	959-98-8	0.13	J	0.049	0.18	1
01363	Endosulfan II	33213-65-9	0.30	U	0.30	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.34	U	0.34	0.37	1
01363	Endrin	72-20-8	0.073	U	0.073	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.64	U	0.64	0.64	1
01363	Endrin Ketone	53494-70-5	0.073	U	0.073	0.37	1
01363	Heptachlor	76-44-8	0.13	U	0.13	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.45	U	0.45	0.45	1
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8	1
01363	Mirex	2385-85-5	0.60	U	0.60	0.60	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.3	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	2.6	J	1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9	1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9	1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.9	1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9	1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9	1
10225	PCB-1254	11097-69-1	2.2		0.36	1.9	1
10225	PCB-1260	11096-82-5	1.1	J	0.36	1.9	1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9	1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Sample Description: SED-011-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD011 SDG#: DE042-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,500		5.44	21.6	1
07914	Boron	7440-42-8	5.55		0.962	5.40	1
01650	Calcium	7440-70-2	3,840		6.63	21.6	1
01654	Iron	7439-89-6	18,200		5.09	21.6	1
01656	Lithium	7439-93-2	23.4		0.24	2.2	1
01657	Magnesium	7439-95-4	4,210		2.75	10.8	1
06958	Manganese	7439-96-5	330		0.0843	0.540	1
10145	Phosphorus	7723-14-0	457		0.605	10.8	1
01662	Potassium	7440-09-7	3,370		19.5	54.0	1
01667	Sodium	7440-23-5	75.3	J	40.3	108	1
07968	Strontium	7440-24-6	18.4		0.0670	0.540	1
06969	Tin	7440-31-5	2.50	J	1.08	10.8	1
06970	Titanium	7440-32-6	1,080		0.411	1.08	1
10146	Zirconium	7440-67-7	0.908	U	0.908	5.40	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.189	J	0.0662	0.221	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.56		0.0662	0.441	2
06126	Barium	7440-39-3	119		0.119	0.441	2
06127	Beryllium	7440-41-7	0.675		0.0176	0.110	2
06128	Cadmium	7440-43-9	0.279		0.0397	0.110	2
06131	Chromium	7440-47-3	20.1		0.132	0.441	2
06132	Cobalt	7440-48-4	6.24		0.0221	0.110	2
06133	Copper	7440-50-8	9.70		0.0728	0.441	2
06135	Lead	7439-92-1	13.8		0.0115	0.221	2
06138	Molybdenum	7439-98-7	0.641		0.0551	0.110	2
06139	Nickel	7440-02-0	12.9		0.110	0.441	2
06141	Selenium	7782-49-2	0.148	J	0.0441	0.441	2
06142	Silver	7440-22-4	0.0437	J	0.0132	0.110	2
06145	Thallium	7440-28-0	0.368		0.0331	0.110	2
06148	Vanadium	7440-62-2	41.7		0.0243	0.110	2
06149	Zinc	7440-66-6	91.8		0.617	3.31	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0030	U	0.0030	0.105	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0		0.88	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9	U	9.9	33.1	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.60	J	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-011-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD011 SDG#: DE042-01

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	437	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.19	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	9.3	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 13:42	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 17:35	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 00:05	John W Perkins	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	110040016A	01/05/2011 15:36	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 18:24	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/30/2010 23:24	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	110040016A	01/05/2011 09:45	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-011-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD011 SDG#: DE042-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 16:54	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:43	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:43	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 12:57	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:43	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:22	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 08:50	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/12/2011 22:05	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 15:30	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-011-SIV-SD-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167468
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD011 SDG#: DE042-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-013-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167469
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD013 SDG#: DE042-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U	190	570	1
04688	Benzyl alcohol	100-51-6	190	U	190	570	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190	1
04688	4-Chloroaniline	106-47-8	77	U	77	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570	1
04688	2,4-Dinitrophenol	51-28-5	770	U	770	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	28	J	19	380	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	38	U	38	190	1
04688	4-Methylphenol	106-44-5	38	U	38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	38	U	38	190	1
04688	4-Nitroaniline	100-01-6	77	U	77	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	570	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	570	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-013-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167469
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD013 SDG#: DE042-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.77	U	0.77	1.9	1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9	1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	1.7	J	0.77	1.9	1
10138	Benzo(a)pyrene	50-32-8	2.2		0.77	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	4.1		0.77	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	1.4	J	0.77	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	1.3	J	0.77	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21	1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21	1
10138	Chrysene	218-01-9	3.0		0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.77	U	0.77	1.9	1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21	1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21	1
10138	Fluoranthene	206-44-0	3.8		0.77	1.9	1
10138	Fluorene	86-73-7	0.77	U	0.77	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.2	J	0.77	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.77	U	0.77	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.77	U	0.77	1.9	1
10138	Naphthalene	91-20-3	0.77	U	0.77	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.77	U	0.77	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21	1
10138	Phenanthrene	85-01-8	2.1		0.77	1.9	1
10138	Pyrene	129-00-0	3.4		0.77	1.9	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1	1
10401	Dalapon	75-99-0	5.1	U	5.1	10	1
10401	2,4-DB	94-82-6	0.71	U	0.71	2.0	1
10401	Dicamba	1918-00-9	0.78	J	0.46	1.4	1
10401	Dinoseb	88-85-7	0.92	U	0.92	2.8	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U	0.92	2.0	1
10401	MCPA	94-74-6	870		87	290	1
10401	MCPP (Mecoprop)	93-65-2	86	U	86	290	1
10401	2,4,5-T	93-76-5	0.094	U	0.094	0.20	1
10401	2,4,5-TP	93-72-1	0.086	U	0.086	0.20	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19	1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-013-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167469
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD013 SDG#: DE042-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Beta BHC	319-85-7	0.069	U	0.069	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19	1
01363	Chlordane	57-74-9	7.0	U	7.0	7.0	1
01363	p,p-DDD	72-54-8	0.076	U	0.076	0.39	1
01363	p,p-DDE	72-55-9	1.7	U	1.7	1.7	1
01363	p,p-DDT	50-29-3	1.1	U	1.1	1.1	1
01363	Delta BHC	319-86-8	0.071	J	0.041	0.19	1
01363	Dieldrin	60-57-1	0.27	U	0.27	0.39	1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19	1
01363	Endosulfan II	33213-65-9	0.076	U	0.076	0.39	1
01363	Endosulfan Sulfate	1031-07-8	0.076	U	0.076	0.39	1
01363	Endrin	72-20-8	0.076	U	0.076	0.39	1
01363	Endrin Aldehyde	7421-93-4	0.85	U	0.85	0.85	1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39	1
01363	Heptachlor	76-44-8	0.069	U	0.069	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.12	U	0.12	0.19	1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9	1
01363	Mirex	2385-85-5	0.55	U	0.55	0.55	1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8	1
10225	Aroclor 5460	11126-42-4	4.7		1.1	3.8	1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0	1
10225	PCB-1221	11104-28-2	0.57	U	0.57	2.0	1
10225	PCB-1232	11141-16-5	0.60	U	0.60	2.0	1
10225	PCB-1242	53469-21-9	0.57	U	0.57	2.0	1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0	1
10225	PCB-1254	11097-69-1	5.9		0.38	2.0	1
10225	PCB-1260	11096-82-5	3.3		0.38	2.0	1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0	1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,000		5.78	23.0	1
07914	Boron	7440-42-8	4.43	J	1.02	5.75	1
01650	Calcium	7440-70-2	4,700		7.05	23.0	1
01654	Iron	7439-89-6	27,700		5.41	23.0	1
01656	Lithium	7439-93-2	32.2		0.25	2.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-013-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167469
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD013 SDG#: DE042-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	6,690		2.92	11.5	1
06958	Manganese	7439-96-5	524		0.0897	0.575	1
10145	Phosphorus	7723-14-0	449		0.644	11.5	1
01662	Potassium	7440-09-7	4,530		20.7	57.5	1
01667	Sodium	7440-23-5	112	J	42.9	115	1
07968	Strontium	7440-24-6	24.5		0.0713	0.575	1
06969	Tin	7440-31-5	2.83	J	1.15	11.5	1
06970	Titanium	7440-32-6	1,550		0.437	1.15	1
10146	Zirconium	7440-67-7	0.966	U	0.966	5.75	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.188	J	0.0657	0.219	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	9.74		0.0657	0.438	2
06126	Barium	7440-39-3	180		0.118	0.438	2
06127	Beryllium	7440-41-7	1.06		0.0175	0.109	2
06128	Cadmium	7440-43-9	0.423		0.0394	0.109	2
06131	Chromium	7440-47-3	37.4		0.131	0.438	2
06132	Cobalt	7440-48-4	9.87		0.0219	0.109	2
06133	Copper	7440-50-8	15.4		0.0722	0.438	2
06135	Lead	7439-92-1	19.8		0.0114	0.219	2
06138	Molybdenum	7439-98-7	0.992		0.0547	0.109	2
06139	Nickel	7440-02-0	21.7		0.109	0.438	2
06141	Selenium	7782-49-2	0.207	J	0.0438	0.438	2
06142	Silver	7440-22-4	0.0981	J	0.0131	0.109	2
06145	Thallium	7440-28-0	0.575		0.0328	0.109	2
06148	Vanadium	7440-62-2	69.0		0.0241	0.109	2
06149	Zinc	7440-66-6	141		0.613	3.28	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0198	J	0.0031	0.109	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6		0.92	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.5	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.95	J	0.23	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	418		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						

*=This limit was used in the evaluation of the final result

Sample Description: SED-013-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167469
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD013 SDG#: DE042-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.32	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	13.0	0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 14:12	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 18:08	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 00:32	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 18:38	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/30/2010 23:43	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-013-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167469
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD013 SDG#: DE042-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:05	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:46	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:46	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:00	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:46	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:23	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 09:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/12/2011 23:37	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 15:46	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-017-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167470
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD017 SDG#: DE042-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	560	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U	190	560	1
04688	Benzyl alcohol	100-51-6	190	U	190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190	1
04688	4-Chloroaniline	106-47-8	75	U	75	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560	1
04688	2,4-Dinitrophenol	51-28-5	750	U	750	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	51	J	19	380	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	38	U	38	190	1
04688	4-Methylphenol	106-44-5	38	U	38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	38	U	38	190	1
04688	4-Nitroaniline	100-01-6	75	U	75	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	560	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-017-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167470
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD017 SDG#: DE042-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.75	U	0.75	1.9	1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9	1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.75	U	0.75	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.75	U	0.75	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.75	U	0.75	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U	0.75	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U	0.75	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.8	U	6.8	20	1
10138	Di-n-butylphthalate	84-74-2	6.8	U	6.8	20	1
10138	Chrysene	218-01-9	1.8	J	0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U	0.75	1.9	1
10138	Diethylphthalate	84-66-2	6.8	U	6.8	20	1
10138	Dimethylphthalate	131-11-3	6.8	U	6.8	20	1
10138	Fluoranthene	206-44-0	0.75	U	0.75	1.9	1
10138	Fluorene	86-73-7	0.75	U	0.75	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	U	0.75	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.75	U	0.75	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.75	U	0.75	1.9	1
10138	Naphthalene	91-20-3	0.75	U	0.75	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U	0.75	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.8	U	6.8	20	1
10138	Phenanthrene	85-01-8	0.75	U	0.75	1.9	1
10138	Pyrene	129-00-0	0.75	U	0.75	1.9	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.9	J	1.4	4.1	1
10401	Dalapon	75-99-0	5.0	U	5.0	10	1
10401	2,4-DB	94-82-6	0.70	U	0.70	1.9	1
10401	Dicamba	1918-00-9	0.49	J	0.45	1.4	1
10401	Dinoseb	88-85-7	0.90	U	0.90	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U	0.90	1.9	1
10401	MCPA	94-74-6	360	U	360	360	1
10401	MCPP (Mecoprop)	93-65-2	220	J	85	280	1
10401	2,4,5-T	93-76-5	0.093	U	0.093	0.19	1
10401	2,4,5-TP	93-72-1	0.085	U	0.085	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SED-017-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167470
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD017 SDG#: DE042-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.075	U	0.075	0.19	1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.19	1
01363	Beta BHC	319-85-7	0.068	U	0.068	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.038	U	0.038	0.19	1
01363	Chlordane	57-74-9	2.1	U	2.1	3.8	1
01363	p,p-DDD	72-54-8	0.075	U	0.075	0.38	1
01363	p,p-DDE	72-55-9	1.3	U	1.3	1.3	1
01363	p,p-DDT	50-29-3	2.1	U	2.1	2.1	1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19	1
01363	Dieldrin	60-57-1	0.34	U	0.34	0.38	1
01363	Endosulfan I	959-98-8	0.050	U	0.050	0.19	1
01363	Endosulfan II	33213-65-9	0.15	U	0.15	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.075	U	0.075	0.38	1
01363	Endrin	72-20-8	0.075	U	0.075	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.28	U	0.28	0.38	1
01363	Endrin Ketone	53494-70-5	0.22	U	0.22	0.38	1
01363	Heptachlor	76-44-8	0.068	U	0.068	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.055	U	0.055	0.19	1
01363	Methoxychlor	72-43-5	0.38	U	0.38	1.9	1
01363	Mirex	2385-85-5	0.55	U	0.55	0.55	1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.5	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.
The TCX surrogate data is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.3	U	2.3	7.5	2
10225	Aroclor 5442	12642-23-8	2.3	U	2.3	7.5	2
10225	Aroclor 5460	11126-42-4	13		2.3	7.5	2
10225	PCB-1016	12674-11-2	0.75	U	0.75	3.8	2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.8	2
10225	PCB-1232	11141-16-5	1.2	U	1.2	3.8	2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.8	2
10225	PCB-1248	12672-29-6	0.75	U	0.75	3.8	2
10225	PCB-1254	11097-69-1	4.1		0.75	3.8	2
10225	PCB-1260	11096-82-5	6.9		0.75	3.8	2
10225	PCB-1262	37324-23-5	0.75	U	0.75	3.8	2
10225	PCB-1268	11100-14-4	0.75	U	0.75	3.8	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SED-017-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167470
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD017 SDG#: DE042-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,100		5.57	22.2	1
07914	Boron	7440-42-8	5.92		0.986	5.54	1
01650	Calcium	7440-70-2	5,400		6.79	22.2	1
01654	Iron	7439-89-6	17,500		5.22	22.2	1
01656	Lithium	7439-93-2	22.2		0.24	2.2	1
01657	Magnesium	7439-95-4	4,030		2.81	11.1	1
06958	Manganese	7439-96-5	270		0.0864	0.554	1
10145	Phosphorus	7723-14-0	475		0.620	11.1	1
01662	Potassium	7440-09-7	3,590		19.9	55.4	1
01667	Sodium	7440-23-5	79.4	J	41.3	111	1
07968	Strontium	7440-24-6	23.6		0.0687	0.554	1
06969	Tin	7440-31-5	2.51	J	1.11	11.1	1
06970	Titanium	7440-32-6	1,080		0.421	1.11	1
10146	Zirconium	7440-67-7	1.45	J	0.931	5.54	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.210	J	0.0665	0.222	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.45		0.0665	0.443	2
06126	Barium	7440-39-3	136		0.120	0.443	2
06127	Beryllium	7440-41-7	0.735		0.0177	0.111	2
06128	Cadmium	7440-43-9	0.743		0.0399	0.111	2
06131	Chromium	7440-47-3	30.3		0.133	0.443	2
06132	Cobalt	7440-48-4	7.30		0.0222	0.111	2
06133	Copper	7440-50-8	16.0		0.0731	0.443	2
06135	Lead	7439-92-1	29.7		0.0115	0.222	2
06138	Molybdenum	7439-98-7	0.865		0.0554	0.111	2
06139	Nickel	7440-02-0	15.7		0.111	0.443	2
06141	Selenium	7782-49-2	0.120	J	0.0443	0.443	2
06142	Silver	7440-22-4	0.141		0.0133	0.111	2
06145	Thallium	7440-28-0	0.387		0.0332	0.111	2
06148	Vanadium	7440-62-2	52.1		0.0244	0.111	2
06149	Zinc	7440-66-6	117		0.620	3.32	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0741	J	0.0031	0.107	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.1	J	0.90	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2	U	10.2	33.9	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.56	J	0.23	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-017-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167470
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD017 SDG#: DE042-03

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	426	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.92	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	11.5	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 14:41	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 18:41	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 00:59	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 19:06	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 00:02	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-017-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167470
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD017 SDG#: DE042-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:09	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:55	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:55	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:07	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:55	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:24	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 09:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 00:01	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 16:02	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-019-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167471
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD019 SDG#: DE042-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	220	U	220	670	1
04688	Benzidine	92-87-5	1,600	U	1,600	4,500	1
04688	Benzo(a)anthracene	56-55-3	24	J	22	220	1
04688	Benzoic acid	65-85-0	220	U	220	670	1
04688	Benzyl alcohol	100-51-6	220	U	220	670	1
04688	4-Bromophenyl-phenylether	101-55-3	22	U	22	220	1
04688	Butylbenzylphthalate	85-68-7	42	J	22	220	1
04688	Di-n-butylphthalate	84-74-2	26	J	22	220	1
04688	Carbazole	86-74-8	22	U	22	220	1
04688	4-Chloro-3-methylphenol	59-50-7	45	U	45	220	1
04688	4-Chloroaniline	106-47-8	90	U	90	220	1
04688	bis(2-Chloroethoxy)methane	111-91-1	22	U	22	220	1
04688	bis(2-Chloroethyl)ether	111-44-4	22	U	22	220	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	22	U	22	220	1
04688	2-Chloronaphthalene	91-58-7	22	U	22	220	1
04688	2-Chlorophenol	95-57-8	22	U	22	220	1
04688	4-Chlorophenyl-phenylether	7005-72-3	45	U	45	220	1
04688	Chrysene	218-01-9	37	J	22	220	1
04688	Dibenzofuran	132-64-9	22	U	22	220	1
04688	1,2-Dichlorobenzene	95-50-1	22	U	22	220	1
04688	1,3-Dichlorobenzene	541-73-1	22	U	22	220	1
04688	1,4-Dichlorobenzene	106-46-7	22	U	22	220	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U	130	450	1
04688	2,4-Dichlorophenol	120-83-2	22	U	22	220	1
04688	Diethylphthalate	84-66-2	22	U	22	220	1
04688	2,4-Dimethylphenol	105-67-9	45	U	45	220	1
04688	3,5-Dimethylphenol	108-68-9	45	U	45	220	1
04688	Dimethylphthalate	131-11-3	22	U	22	220	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	220	U	220	670	1
04688	2,4-Dinitrophenol	51-28-5	900	U	900	2,700	1
04688	2,4-Dinitrotoluene	121-14-2	45	U	45	220	1
04688	2,6-Dinitrotoluene	606-20-2	22	U	22	220	1
04688	1,2-Diphenylhydrazine	122-66-7	22	U	22	220	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	120	J	22	450	1
04688	Fluoranthene	206-44-0	71	J	22	220	1
04688	Hexachlorobenzene	118-74-1	22	U	22	220	1
04688	Hexachlorobutadiene	87-68-3	90	U	90	220	1
04688	Hexachlorocyclopentadiene	77-47-4	220	U	220	670	1
04688	Hexachloroethane	67-72-1	22	U	22	220	1
04688	Isophorone	78-59-1	22	U	22	220	1
04688	2-Methylphenol	95-48-7	45	U	45	220	1
04688	4-Methylphenol	106-44-5	45	U	45	220	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	22	U	22	220	1
04688	3-Nitroaniline	99-09-2	45	U	45	220	1
04688	4-Nitroaniline	100-01-6	90	U	90	220	1
04688	Nitrobenzene	98-95-3	22	U	22	220	1
04688	2-Nitrophenol	88-75-5	22	U	22	220	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-019-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167471
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD019 SDG#: DE042-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	4-Nitrophenol	100-02-7	220	U	220	670	1
04688	N-Nitroso-di-n-propylamine	621-64-7	22	U	22	220	1
04688	N-Nitrosodiphenylamine	86-30-6	22	U	22	220	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	22	U	22	220	1
04688	Pentachlorophenol	87-86-5	220	U	220	670	1
04688	Phenol	108-95-2	22	U	22	220	1
04688	Pyrene	129-00-0	47	J	22	220	1
04688	1,2,4-Trichlorobenzene	120-82-1	22	U	22	220	1
04688	2,4,5-Trichlorophenol	95-95-4	45	U	45	220	1
04688	2,4,6-Trichlorophenol	88-06-2	45	U	45	220	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	4.5	U	4.5	11	5
10138	Acenaphthylene	208-96-8	2.2	U	2.2	11	5
10138	Anthracene	120-12-7	6.0	J	2.2	11	5
10138	Benzo(a)pyrene	50-32-8	16		4.5	11	5
10138	Benzo(b)fluoranthene	205-99-2	35		4.5	11	5
10138	Benzo(g,h,i)perylene	191-24-2	12		4.5	11	5
10138	Benzo(k)fluoranthene	207-08-9	9.7	J	4.5	11	5
10138	Dibenz(a,h)anthracene	53-70-3	4.5	U	4.5	11	5
10138	Fluorene	86-73-7	4.5	U	4.5	11	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	8.6	J	4.5	11	5
10138	1-Methylnaphthalene	90-12-0	4.5	U	4.5	11	5
10138	2-Methylnaphthalene	91-57-6	4.5	U	4.5	11	5
10138	Naphthalene	91-20-3	9.0	J	4.5	11	5
10138	N-Nitrosodimethylamine	62-75-9	4.5	U	4.5	11	5
10138	Phenanthrene	85-01-8	22		4.5	11	5
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.6	U	1.6	4.9	1
10401	Dalapon	75-99-0	5.9	U	5.9	12	1
10401	2,4-DB	94-82-6	0.84	U	0.84	2.3	1
10401	Dicamba	1918-00-9	0.73	J	0.54	1.6	1
10401	Dinoseb	88-85-7	1.1	U	1.1	3.2	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.1	U	1.1	2.3	1
10401	MCPA	94-74-6	700		100	340	1
10401	MCPP (Mecoprop)	93-65-2	670	U	670	670	1
10401	2,4,5-T	93-76-5	0.62	U	0.62	0.62	1
10401	2,4,5-TP	93-72-1	0.53		0.10	0.23	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Sample Description: SED-019-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167471
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD019 SDG#: DE042-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.44	U	0.44	1.1	5
01363	Alpha BHC	319-84-6	0.23	U	0.23	1.1	5
01363	Beta BHC	319-85-7	0.40	U	0.40	1.1	5
01363	Gamma BHC - Lindane	58-89-9	0.23	U	0.23	1.1	5
01363	Chlordane	57-74-9	22	U	22	23	5
01363	p,p-DDD	72-54-8	19	U	19	19	20
01363	p,p-DDE	72-55-9	2.1	U	2.1	2.3	5
01363	p,p-DDT	50-29-3	32	U	32	32	20
01363	Delta BHC	319-86-8	0.29	J	0.24	1.1	5
01363	Dieldrin	60-57-1	1.6	U	1.6	2.3	5
01363	Endosulfan I	959-98-8	0.30	U	0.30	1.1	5
01363	Endosulfan II	33213-65-9	1.6	U	1.6	2.3	5
01363	Endosulfan Sulfate	1031-07-8	0.44	U	0.44	2.3	5
01363	Endrin	72-20-8	0.44	U	0.44	2.3	5
01363	Endrin Aldehyde	7421-93-4	5.9	U	5.9	5.9	5
01363	Endrin Ketone	53494-70-5	0.44	U	0.44	2.3	5
01363	Heptachlor	76-44-8	0.40	U	0.40	1.1	5
01363	Heptachlor Epoxide	1024-57-3	0.75	U	0.75	1.1	5
01363	Methoxychlor	72-43-5	2.3	U	2.3	11	5
01363	Mirex	2385-85-5	1.8	U	1.8	2.3	5
01363	Toxaphene	8001-35-2	15	U	15	44	5
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	13	U	13	44	10
10225	Aroclor 5442	12642-23-8	13	U	13	44	10
10225	Aroclor 5460	11126-42-4	130		13	44	10
10225	PCB-1016	12674-11-2	4.4	U	4.4	23	10
10225	PCB-1221	11104-28-2	6.7	U	6.7	23	10
10225	PCB-1232	11141-16-5	7.0	U	7.0	23	10
10225	PCB-1242	53469-21-9	6.7	U	6.7	23	10
10225	PCB-1248	12672-29-6	4.4	U	4.4	23	10
10225	PCB-1254	11097-69-1	99		4.4	23	10
10225	PCB-1260	11096-82-5	180		4.4	23	10
10225	PCB-1262	37324-23-5	4.4	U	4.4	23	10
10225	PCB-1268	11100-14-4	4.4	U	4.4	23	10
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,900		6.52	25.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-019-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167471
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD019 SDG#: DE042-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
07914	Boron	7440-42-8	6.31	J	1.15	6.48	1
01650	Calcium	7440-70-2	3,050		7.94	25.9	1
01654	Iron	7439-89-6	25,200		6.10	25.9	1
01656	Lithium	7439-93-2	26.8		0.29	2.6	1
01657	Magnesium	7439-95-4	4,990		3.29	13.0	1
06958	Manganese	7439-96-5	269		0.101	0.648	1
10145	Phosphorus	7723-14-0	707		0.726	13.0	1
01662	Potassium	7440-09-7	3,540		23.3	64.8	1
01667	Sodium	7440-23-5	136		48.3	130	1
07968	Strontium	7440-24-6	26.2		0.0803	0.648	1
06969	Tin	7440-31-5	3.05	J	1.30	13.0	1
06970	Titanium	7440-32-6	1,270		0.492	1.30	1
10146	Zirconium	7440-67-7	1.15	J	1.09	6.48	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.931		0.0785	0.262	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	11.1		0.0785	0.523	2
06126	Barium	7440-39-3	183		0.141	0.523	2
06127	Beryllium	7440-41-7	1.07		0.0209	0.131	2
06128	Cadmium	7440-43-9	2.23		0.0471	0.131	2
06131	Chromium	7440-47-3	40.2		0.157	0.523	2
06132	Cobalt	7440-48-4	11.2		0.0262	0.131	2
06133	Copper	7440-50-8	50.5		0.0864	0.523	2
06135	Lead	7439-92-1	54.2		0.0136	0.262	2
06138	Molybdenum	7439-98-7	3.69		0.0654	0.131	2
06139	Nickel	7440-02-0	23.5		0.131	0.523	2
06141	Selenium	7782-49-2	0.202	J	0.0523	0.523	2
06142	Silver	7440-22-4	0.267		0.0157	0.131	2
06145	Thallium	7440-28-0	0.505		0.0393	0.131	2
06148	Vanadium	7440-62-2	68.2		0.0288	0.131	2
06149	Zinc	7440-66-6	308		1.83	9.81	5
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.574		0.0036	0.127	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4		1.1	1.3	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	12.1	U	12.1	40.4	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.27	U	0.27	1.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-019-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167471
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD019 SDG#: DE042-04

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	557	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	4.76	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	25.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 15:10	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 19:14	Gregory J Drahovsky	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 01:27	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 19:21	Jamie L Brillhart	5
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 19:36	Jamie L Brillhart	20
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 00:20	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-019-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167471
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD019 SDG#: DE042-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:13	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:58	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:58	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:09	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:58	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	01/04/2011 13:52	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:25	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 09:32	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 00:24	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11013243202A	01/18/2011 16:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-020-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD020 SDG#: DE042-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	72	U	72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U	720	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U	72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	72	U	72	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	540	1
04688	Phenol	108-95-2	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-020-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD020 SDG#: DE042-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8	1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.72	U	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.72	U	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.72	U	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.72	U	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20	1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	20	1
10138	Chrysene	218-01-9	0.36	U	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20	1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5	U	6.5	20	1
10138	Fluoranthene	206-44-0	0.72	U	0.72	1.8	1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	U	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.72	U	0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.72	U	0.72	1.8	1
10138	Naphthalene	91-20-3	0.72	U	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20	1
10138	Phenanthrene	85-01-8	0.72	U	0.72	1.8	1
10138	Pyrene	129-00-0	0.72	U	0.72	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.8	U	4.8	9.8	1
10401	2,4-DB	94-82-6	10	U	10	10	1
10401	Dicamba	1918-00-9	0.57	J	0.43	1.3	1
10401	Dinoseb	88-85-7	0.87	U	0.87	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.87	U	0.87	1.8	1
10401	MCPA	94-74-6	310		83	270	1
10401	MCPP (Mecoprop)	93-65-2	540	U	540	540	1
10401	2,4,5-T	93-76-5	0.089	U	0.089	0.18	1
10401	2,4,5-TP	93-72-1	0.082	U	0.082	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SED-020-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD020 SDG#: DE042-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.3	U	2.3	5.4	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.072	U	0.072	0.18	1
01363	Alpha BHC	319-84-6	0.037	U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.065	U	0.065	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037	U	0.037	0.18	1
01363	Chlordane	57-74-9	3.0	U	3.0	3.7	1
01363	p,p-DDD	72-54-8	0.17	U	0.17	0.37	1
01363	p,p-DDE	72-55-9	0.41	U	0.41	0.41	1
01363	p,p-DDT	50-29-3	1.0	U	1.0	1.0	1
01363	Delta BHC	319-86-8	0.075	J	0.039	0.18	1
01363	Dieldrin	60-57-1	0.072	U	0.072	0.37	1
01363	Endosulfan I	959-98-8	0.093	U	0.093	0.18	1
01363	Endosulfan II	33213-65-9	0.13	U	0.13	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.072	U	0.072	0.37	1
01363	Endrin	72-20-8	0.072	U	0.072	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.072	U	0.072	0.37	1
01363	Endrin Ketone	53494-70-5	0.072	U	0.072	0.37	1
01363	Heptachlor	76-44-8	0.065	U	0.065	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.074	U	0.074	0.18	1
01363	Methoxychlor	72-43-5	0.58	U	0.58	1.8	1
01363	Mirex	2385-85-5	0.33	U	0.33	0.37	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.2	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.2	U	2.2	7.2	2
10225	Aroclor 5442	12642-23-8	2.2	U	2.2	7.2	2
10225	Aroclor 5460	11126-42-4	6.6	J	2.2	7.2	2
10225	PCB-1016	12674-11-2	0.72	U	0.72	3.7	2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.7	2
10225	PCB-1232	11141-16-5	1.1	U	1.1	3.7	2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.7	2
10225	PCB-1248	12672-29-6	0.72	U	0.72	3.7	2
10225	PCB-1254	11097-69-1	2.5	J	0.72	3.7	2
10225	PCB-1260	11096-82-5	10		0.72	3.7	2
10225	PCB-1262	37324-23-5	0.72	U	0.72	3.7	2
10225	PCB-1268	11100-14-4	0.72	U	0.72	3.7	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	

Sample Description: SED-020-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD020 SDG#: DE042-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	9,110		5.36	21.3	1
07914	Boron	7440-42-8	3.88	J	0.948	5.33	1
01650	Calcium	7440-70-2	2,190		6.53	21.3	1
01654	Iron	7439-89-6	14,100		5.02	21.3	1
01656	Lithium	7439-93-2	22.5		0.23	2.1	1
01657	Magnesium	7439-95-4	3,380		2.71	10.7	1
06958	Manganese	7439-96-5	206		0.0831	0.533	1
10145	Phosphorus	7723-14-0	310		0.597	10.7	1
01662	Potassium	7440-09-7	2,480		19.2	53.3	1
01667	Sodium	7440-23-5	60.8	J	39.7	107	1
07968	Strontium	7440-24-6	12.8		0.0661	0.533	1
06969	Tin	7440-31-5	2.28	J	1.07	10.7	1
06970	Titanium	7440-32-6	868		0.405	1.07	1
10146	Zirconium	7440-67-7	0.895	U	0.895	5.33	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.191	J	0.0627	0.209	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.71		0.0627	0.418	2
06126	Barium	7440-39-3	95.9		0.113	0.418	2
06127	Beryllium	7440-41-7	0.548		0.0167	0.105	2
06128	Cadmium	7440-43-9	0.311		0.0376	0.105	2
06131	Chromium	7440-47-3	19.0		0.125	0.418	2
06132	Cobalt	7440-48-4	5.25		0.0209	0.105	2
06133	Copper	7440-50-8	8.77		0.0690	0.418	2
06135	Lead	7439-92-1	12.2		0.0109	0.209	2
06138	Molybdenum	7439-98-7	0.497		0.0523	0.105	2
06139	Nickel	7440-02-0	11.1		0.105	0.418	2
06141	Selenium	7782-49-2	0.0829	J	0.0418	0.418	2
06142	Silver	7440-22-4	0.0561	J	0.0125	0.105	2
06145	Thallium	7440-28-0	0.284		0.0314	0.105	2
06148	Vanadium	7440-62-2	38.2		0.0230	0.105	2
06149	Zinc	7440-66-6	96.5		0.585	3.14	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0051	J	0.0030	0.105	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.1		0.87	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.6	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-020-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD020 SDG#: DE042-05

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	477	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	6.84	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	8.0	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 15:40	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 19:46	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 01:54	John W Perkins	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	110040016A	01/05/2011 15:54	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 19:51	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 00:39	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	110040016A	01/05/2011 09:45	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-020-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD020 SDG#: DE042-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:17	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:01	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:01	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:12	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:01	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:27	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 09:47	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 00:47	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11013243202A	01/18/2011 16:26	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-020-SIV-SD-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167472
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD020 SDG#: DE042-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167473
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL147 SDG#: DE042-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U	190	570	1
04688	Benzyl alcohol	100-51-6	190	U	190	570	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190	1
04688	4-Chloroaniline	106-47-8	76	U	76	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570	1
04688	2,4-Dinitrophenol	51-28-5	760	U	760	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	44	J	19	380	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	38	U	38	190	1
04688	4-Methylphenol	106-44-5	38	U	38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	38	U	38	190	1
04688	4-Nitroaniline	100-01-6	76	U	76	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	570	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	570	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167473
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL147 SDG#: DE042-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9	1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9	1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	15		0.76	1.9	1
10138	Benzo(a)pyrene	50-32-8	15		0.76	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	18		0.76	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	6.2		0.76	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	4.8		0.76	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21	1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21	1
10138	Chrysene	218-01-9	26		0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	1.9	J	0.76	1.9	1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21	1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21	1
10138	Fluoranthene	206-44-0	10		0.76	1.9	1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.7		0.76	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9	1
10138	Naphthalene	91-20-3	0.76	U	0.76	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21	1
10138	Phenanthrene	85-01-8	2.8		0.76	1.9	1
10138	Pyrene	129-00-0	12		0.76	1.9	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1	1
10401	Dalapon	75-99-0	5.0	U	5.0	10	1
10401	2,4-DB	94-82-6	0.71	U	0.71	1.9	1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4	1
10401	Dinoseb	88-85-7	0.92	U	0.92	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U	0.92	1.9	1
10401	MCPA	94-74-6	260	J	87	290	1
10401	MCPP (Mecoprop)	93-65-2	1,800	U	1,800	1,800	1
10401	2,4,5-T	93-76-5	0.21		0.094	0.19	1
10401	2,4,5-TP	93-72-1	0.086	U	0.086	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167473
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL147 SDG#: DE042-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19	1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19	1
01363	Beta BHC	319-85-7	0.069	U	0.069	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.088	U	0.088	0.19	1
01363	Chlordane	57-74-9	7.2	U	7.2	7.2	1
01363	p,p-DDD	72-54-8	0.97	U	0.97	0.97	1
01363	p,p-DDE	72-55-9	0.84	U	0.84	0.84	1
01363	p,p-DDT	50-29-3	7.4	U	7.4	7.4	5
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19	1
01363	Dieldrin	60-57-1	1.4	U	1.4	1.4	1
01363	Endosulfan I	959-98-8	0.050	U	0.050	0.19	1
01363	Endosulfan II	33213-65-9	0.21	U	0.21	0.39	1
01363	Endosulfan Sulfate	1031-07-8	0.076	U	0.076	0.39	1
01363	Endrin	72-20-8	0.076	U	0.076	0.39	1
01363	Endrin Aldehyde	7421-93-4	2.6	U	2.6	2.6	1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39	1
01363	Heptachlor	76-44-8	0.069	U	0.069	0.19	1
01363	Heptachlor Epoxide	1024-57-3	1.4	U	1.4	1.4	5
01363	Methoxychlor	72-43-5	0.48	U	0.48	1.9	1
01363	Mirex	2385-85-5	0.64	U	0.64	0.64	1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	5.7	U	5.7	19	5
10225	Aroclor 5442	12642-23-8	5.7	U	5.7	19	5
10225	Aroclor 5460	11126-42-4	62		5.7	19	5
10225	PCB-1016	12674-11-2	1.9	U	1.9	9.7	5
10225	PCB-1221	11104-28-2	2.9	U	2.9	9.7	5
10225	PCB-1232	11141-16-5	3.0	U	3.0	9.7	5
10225	PCB-1242	53469-21-9	2.9	U	2.9	9.7	5
10225	PCB-1248	12672-29-6	1.9	U	1.9	9.7	5
10225	PCB-1254	11097-69-1	44		1.9	9.7	5
10225	PCB-1260	11096-82-5	89		1.9	9.7	5
10225	PCB-1262	37324-23-5	1.9	U	1.9	9.7	5
10225	PCB-1268	11100-14-4	1.9	U	1.9	9.7	5

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,300		5.76	22.9	1
07914	Boron	7440-42-8	4.18	J	1.02	5.72	1
01650	Calcium	7440-70-2	4,340		7.01	22.9	1
01654	Iron	7439-89-6	19,000		5.39	22.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167473
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL147 SDG#: DE042-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	21.8		0.25	2.3	1
01657	Magnesium	7439-95-4	4,210		2.91	11.4	1
06958	Manganese	7439-96-5	211		0.0892	0.572	1
10145	Phosphorus	7723-14-0	420		0.641	11.4	1
01662	Potassium	7440-09-7	2,620		20.6	57.2	1
01667	Sodium	7440-23-5	123		42.7	114	1
07968	Strontium	7440-24-6	17.4		0.0709	0.572	1
06969	Tin	7440-31-5	2.28	J	1.14	11.4	1
06970	Titanium	7440-32-6	1,120		0.435	1.14	1
10146	Zirconium	7440-67-7	1.47	J	0.961	5.72	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.319		0.0686	0.229	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	9.55		0.0686	0.458	2
06126	Barium	7440-39-3	176		0.124	0.458	2
06127	Beryllium	7440-41-7	0.926		0.0183	0.114	2
06128	Cadmium	7440-43-9	0.806		0.0412	0.114	2
06131	Chromium	7440-47-3	36.7		0.137	0.458	2
06132	Cobalt	7440-48-4	10.9		0.0229	0.114	2
06133	Copper	7440-50-8	20.3		0.0755	0.458	2
06135	Lead	7439-92-1	40.9		0.0119	0.229	2
06138	Molybdenum	7439-98-7	1.78		0.0572	0.114	2
06139	Nickel	7440-02-0	23.9		0.114	0.458	2
06141	Selenium	7782-49-2	0.143	J	0.0458	0.458	2
06142	Silver	7440-22-4	0.228		0.0137	0.114	2
06145	Thallium	7440-28-0	0.395		0.0343	0.114	2
06148	Vanadium	7440-62-2	63.6		0.0252	0.114	2
06149	Zinc	7440-66-6	161		0.641	3.43	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.148		0.0031	0.110	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.4		0.92	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.3	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	1.1	J	0.23	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	456		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167473
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL147 SDG#: DE042-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.84	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 16:09	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 20:19	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 02:22	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 20:05	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 20:20	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 00:57	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167473
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL147 SDG#: DE042-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:21	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:04	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:04	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:14	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:04	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	01/04/2011 13:14	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:28	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 10:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 01:10	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 16:50	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167474
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL169 SDG#: DE042-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800	1
04688	Benzo(g,h,i)perylene	191-24-2	72	J	19	190	1
04688	Benzoic acid	65-85-0	190	U	190	570	1
04688	Benzyl alcohol	100-51-6	190	U	190	570	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190	1
04688	4-Chloroaniline	106-47-8	76	U	76	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570	1
04688	2,4-Dinitrophenol	51-28-5	760	U	760	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	23	J	19	380	1
04688	Fluoranthene	206-44-0	21	J	19	190	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	82	J	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	38	U	38	190	1
04688	4-Methylphenol	106-44-5	38	U	38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	38	U	38	190	1
04688	4-Nitroaniline	100-01-6	76	U	76	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	570	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167474
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL169 SDG#: DE042-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	570	1
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9	1
10138	Acenaphthylene	208-96-8	0.90	J	0.38	1.9	1
10138	Anthracene	120-12-7	2.0		0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	10		0.76	1.9	1
10138	Benzo(a)pyrene	50-32-8	23		0.76	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	49		0.76	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	13		0.76	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.8	U	6.8	20	1
10138	Di-n-butylphthalate	84-74-2	6.8	U	6.8	20	1
10138	Chrysene	218-01-9	20		0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	5.0		0.76	1.9	1
10138	Diethylphthalate	84-66-2	6.8	U	6.8	20	1
10138	Dimethylphthalate	131-11-3	6.8	U	6.8	20	1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9	1
10138	1-Methylnaphthalene	90-12-0	5.3		0.76	1.9	1
10138	2-Methylnaphthalene	91-57-6	6.2		0.76	1.9	1
10138	Naphthalene	91-20-3	4.4		0.76	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.8	U	6.8	20	1
10138	Phenanthrene	85-01-8	14		0.76	1.9	1
10138	Pyrene	129-00-0	16		0.76	1.9	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1	1
10401	Dalapon	75-99-0	5.0	U	5.0	10	1
10401	2,4-DB	94-82-6	15	U	15	15	1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.4	1
10401	Dinoseb	88-85-7	0.91	U	0.91	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.6	U	1.6	1.9	1
10401	MCPA	94-74-6	510		86	280	1
10401	MCPP (Mecoprop)	93-65-2	520	U	520	520	1
10401	2,4,5-T	93-76-5	0.093	U	0.093	0.19	1
10401	2,4,5-TP	93-72-1	0.085	U	0.085	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167474
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL169 SDG#: DE042-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.075	U	0.075	0.19	1
01363	Alpha BHC	319-84-6	0.057	J	0.039	0.19	1
01363	Beta BHC	319-85-7	0.068	U	0.068	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19	1
01363	Chlordane	57-74-9	3.5	U	3.5	3.9	1
01363	p,p-DDD	72-54-8	0.34	U	0.34	0.39	1
01363	p,p-DDE	72-55-9	0.82	U	0.82	0.82	1
01363	p,p-DDT	50-29-3	0.82	U	0.82	0.82	1
01363	Delta BHC	319-86-8	0.056	J	0.041	0.19	1
01363	Dieldrin	60-57-1	0.075	U	0.075	0.39	1
01363	Endosulfan I	959-98-8	0.050	U	0.050	0.19	1
01363	Endosulfan II	33213-65-9	0.095	U	0.095	0.39	1
01363	Endosulfan Sulfate	1031-07-8	0.075	U	0.075	0.39	1
01363	Endrin	72-20-8	0.075	U	0.075	0.39	1
01363	Endrin Aldehyde	7421-93-4	0.32	U	0.32	0.39	1
01363	Endrin Ketone	53494-70-5	0.075	U	0.075	0.39	1
01363	Heptachlor	76-44-8	0.068	U	0.068	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.25	U	0.25	0.25	1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9	1
01363	Mirex	2385-85-5	0.25	U	0.25	0.39	1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.5	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.3	U	2.3	7.5	2
10225	Aroclor 5442	12642-23-8	2.3	U	2.3	7.5	2
10225	Aroclor 5460	11126-42-4	7.0	J	2.3	7.5	2
10225	PCB-1016	12674-11-2	0.75	U	0.75	3.9	2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.9	2
10225	PCB-1232	11141-16-5	1.2	U	1.2	3.9	2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.9	2
10225	PCB-1248	12672-29-6	0.75	U	0.75	3.9	2
10225	PCB-1254	11097-69-1	16		0.75	3.9	2
10225	PCB-1260	11096-82-5	8.0		0.75	3.9	2
10225	PCB-1262	37324-23-5	0.75	U	0.75	3.9	2
10225	PCB-1268	11100-14-4	0.75	U	0.75	3.9	2
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,700		5.54	22.0	1
07914	Boron	7440-42-8	6.43		0.980	5.50	1
01650	Calcium	7440-70-2	4,530		6.75	22.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167474
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL169 SDG#: DE042-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01654	Iron	7439-89-6	20,200		5.18	22.0	1
01656	Lithium	7439-93-2	22.7		0.24	2.2	1
01657	Magnesium	7439-95-4	4,380		2.80	11.0	1
06958	Manganese	7439-96-5	325		0.0859	0.550	1
10145	Phosphorus	7723-14-0	444		0.616	11.0	1
01662	Potassium	7440-09-7	3,530		19.8	55.0	1
01667	Sodium	7440-23-5	105	J	41.1	110	1
07968	Strontium	7440-24-6	23.5		0.0682	0.550	1
06969	Tin	7440-31-5	2.79	J	1.10	11.0	1
06970	Titanium	7440-32-6	1,210		0.418	1.10	1
10146	Zirconium	7440-67-7	1.96	J	0.925	5.50	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.235		0.0667	0.222	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	10.7		0.0667	0.445	2
06126	Barium	7440-39-3	161		0.120	0.445	2
06127	Beryllium	7440-41-7	0.922		0.0178	0.111	2
06128	Cadmium	7440-43-9	0.562		0.0400	0.111	2
06131	Chromium	7440-47-3	32.2		0.133	0.445	2
06132	Cobalt	7440-48-4	8.98		0.0222	0.111	2
06133	Copper	7440-50-8	16.4		0.0734	0.445	2
06135	Lead	7439-92-1	21.2		0.0116	0.222	2
06138	Molybdenum	7439-98-7	1.12		0.0556	0.111	2
06139	Nickel	7440-02-0	19.9		0.111	0.445	2
06141	Selenium	7782-49-2	0.132	J	0.0445	0.445	2
06142	Silver	7440-22-4	0.249		0.0133	0.111	2
06145	Thallium	7440-28-0	0.446		0.0333	0.111	2
06148	Vanadium	7440-62-2	57.4		0.0245	0.111	2
06149	Zinc	7440-66-6	127		0.622	3.33	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0119	J	0.0032	0.110	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6		0.91	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2	U	10.2	34.0	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	1.9		0.23	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	451		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167474
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL169 SDG#: DE042-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.82	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	11.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 16:39	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 20:52	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 02:49	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 20:34	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 01:16	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167474
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL169 SDG#: DE042-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:25	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:07	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:07	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:07	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:29	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 10:43	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 01:33	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 17:06	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167475
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL172 SDG#: DE042-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1
04688	Phenol	108-95-2	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167475
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL172 SDG#: DE042-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	1.4	J	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	1.5	J	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	3.7		0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	1.1	J	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	1.1	J	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19	1
10138	Chrysene	218-01-9	3.2		0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	14	J	6.4	19	1
10138	Fluoranthene	206-44-0	6.0		0.71	1.8	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.82	J	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.86	J	0.71	1.8	1
10138	Naphthalene	91-20-3	0.94	J	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
10138	Phenanthrene	85-01-8	3.8		0.71	1.8	1
10138	Pyrene	129-00-0	4.2		0.71	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.5	1
10401	2,4-DB	94-82-6	0.66	U	0.66	1.8	1
10401	Dicamba	1918-00-9	0.64	U	0.64	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	280		81	260	1
10401	MCPP (Mecoprop)	93-65-2	79	U	79	260	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.31	U	0.31	0.31	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167475
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL172 SDG#: DE042-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.090	J	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	J	0.036	0.18	1
01363	Chlordane	57-74-9	2.9	U	2.9	3.6	1
01363	p,p-DDD	72-54-8	0.15	U	0.15	0.36	1
01363	p,p-DDE	72-55-9	0.26	U	0.26	0.36	1
01363	p,p-DDT	50-29-3	0.32	U	0.32	0.36	1
01363	Delta BHC	319-86-8	0.15	J	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.073	U	0.073	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.35	U	0.35	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.13	U	0.13	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.052	U	0.052	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	2.1	J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	2.0		0.35	1.8	1
10225	PCB-1260	11096-82-5	0.92	J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,800		5.33	21.2	1
07914	Boron	7440-42-8	4.12	J	0.943	5.30	1
01650	Calcium	7440-70-2	2,300		6.49	21.2	1
01654	Iron	7439-89-6	18,900		4.99	21.2	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167475
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL172 SDG#: DE042-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	18.7		0.23	2.1	1
01657	Magnesium	7439-95-4	3,600		2.69	10.6	1
06958	Manganese	7439-96-5	271		0.0826	0.530	1
10145	Phosphorus	7723-14-0	309		0.593	10.6	1
01662	Potassium	7440-09-7	3,250		19.1	53.0	1
01667	Sodium	7440-23-5	72.7	J	39.5	106	1
07968	Strontium	7440-24-6	21.5		0.0657	0.530	1
06969	Tin	7440-31-5	2.29	J	1.06	10.6	1
06970	Titanium	7440-32-6	1,180		0.403	1.06	1
10146	Zirconium	7440-67-7	1.11	J	0.890	5.30	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.213		0.0636	0.212	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	12.2		0.0636	0.424	2
06126	Barium	7440-39-3	158		0.114	0.424	2
06127	Beryllium	7440-41-7	0.925		0.0169	0.106	2
06128	Cadmium	7440-43-9	0.326		0.0381	0.106	2
06131	Chromium	7440-47-3	32.1		0.127	0.424	2
06132	Cobalt	7440-48-4	8.47		0.0212	0.106	2
06133	Copper	7440-50-8	13.8		0.0699	0.424	2
06135	Lead	7439-92-1	18.6		0.0110	0.212	2
06138	Molybdenum	7439-98-7	1.13		0.0530	0.106	2
06139	Nickel	7440-02-0	19.3		0.106	0.424	2
06141	Selenium	7782-49-2	0.119	J	0.0424	0.424	2
06142	Silver	7440-22-4	0.0762	J	0.0127	0.106	2
06145	Thallium	7440-28-0	0.442		0.0318	0.106	2
06148	Vanadium	7440-62-2	55.2		0.0233	0.106	2
06149	Zinc	7440-66-6	84.3		0.593	3.18	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0029	U	0.0029	0.101	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.95	J	0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.8	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.32	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	482		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167475
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL172 SDG#: DE042-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.02	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	5.6	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 17:08	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 21:25	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 03:17	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 20:49	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 01:34	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167475
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL172 SDG#: DE042-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:29	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:10	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:10	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:30	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 10:58	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 01:56	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 17:38	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167476
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL173 SDG#: DE042-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	49	J	18	360	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167476
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL173 SDG#: DE042-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	1.6	J	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.94	J	0.36	1.8	1
10138	Anthracene	120-12-7	1.4	J	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	4.1		0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	7.3		0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	20		0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	11		0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	5.5		0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19	1
10138	Chrysene	218-01-9	12		0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.6	J	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluoranthene	206-44-0	31		0.71	1.8	1
10138	Fluorene	86-73-7	1.3	J	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	11		0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	2.4		0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	3.1		0.71	1.8	1
10138	Naphthalene	91-20-3	2.4		0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
10138	Phenanthrene	85-01-8	22		0.71	1.8	1
10138	Pyrene	129-00-0	19		0.71	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	22	U	22	22	1
10401	Dicamba	1918-00-9	0.50	U	0.50	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	7.0		0.85	1.8	1
10401	MCPA	94-74-6	220	U	220	270	1
10401	MCPP (Mecoprop)	93-65-2	180	U	180	270	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167476
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL173 SDG#: DE042-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.16	U	0.16	0.36	1
01363	p,p-DDE	72-55-9	0.45	U	0.45	0.45	1
01363	p,p-DDT	50-29-3	0.47	U	0.47	0.47	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.12	U	0.12	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.12	U	0.12	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.17	U	0.17	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.077	U	0.077	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	3.8		1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	0.35	U	0.35	1.8	1
10225	PCB-1260	11096-82-5	3.7		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,700		5.21	20.7	1
07914	Boron	7440-42-8	3.94	J	0.921	5.18	1
01650	Calcium	7440-70-2	2,350		6.34	20.7	1
01654	Iron	7439-89-6	18,400		4.88	20.7	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167476
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL173 SDG#: DE042-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	18.9		0.23	2.1	1
01657	Magnesium	7439-95-4	3,560		2.63	10.4	1
06958	Manganese	7439-96-5	307		0.0807	0.518	1
10145	Phosphorus	7723-14-0	290		0.580	10.4	1
01662	Potassium	7440-09-7	3,340		18.6	51.8	1
01667	Sodium	7440-23-5	79.3	J	38.6	104	1
07968	Strontium	7440-24-6	20.8		0.0642	0.518	1
06969	Tin	7440-31-5	2.36	J	1.04	10.4	1
06970	Titanium	7440-32-6	1,140		0.393	1.04	1
10146	Zirconium	7440-67-7	1.53	J	0.869	5.18	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.216		0.0615	0.205	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	11.2		0.0615	0.410	2
06126	Barium	7440-39-3	155		0.111	0.410	2
06127	Beryllium	7440-41-7	0.893		0.0164	0.103	2
06128	Cadmium	7440-43-9	0.345		0.0369	0.103	2
06131	Chromium	7440-47-3	30.0		0.123	0.410	2
06132	Cobalt	7440-48-4	8.40		0.0205	0.103	2
06133	Copper	7440-50-8	13.6		0.0677	0.410	2
06135	Lead	7439-92-1	16.3		0.0107	0.205	2
06138	Molybdenum	7439-98-7	1.16		0.0513	0.103	2
06139	Nickel	7440-02-0	18.7		0.103	0.410	2
06141	Selenium	7782-49-2	0.118	J	0.0410	0.410	2
06142	Silver	7440-22-4	0.0930	J	0.0123	0.103	2
06145	Thallium	7440-28-0	0.448		0.0308	0.103	2
06148	Vanadium	7440-62-2	53.7		0.0226	0.103	2
06149	Zinc	7440-66-6	99.2		0.574	3.08	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0053	J	0.0028	0.0986	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.7		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	32.0	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.40	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	476		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167476
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL173 SDG#: DE042-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.67	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 17:37	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 21:58	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 03:44	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 21:04	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 01:53	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167476
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL173 SDG#: DE042-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:33	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:21	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:34	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 11:12	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 02:19	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 17:54	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167477
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL176 SDG#: DE042-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	70	U	70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	70	U	70	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1
04688	Phenol	108-95-2	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167477
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL176 SDG#: DE042-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	7.3		0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	14		0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	65		0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	49		0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	87		0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	17		0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	35		0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19	1
10138	Chrysene	218-01-9	73		0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	6.0		0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.3	U	6.3	19	1
10138	Fluoranthene	206-44-0	180		0.70	1.8	1
10138	Fluorene	86-73-7	5.7		0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	18		0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.95	J	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	1.0	J	0.70	1.8	1
10138	Naphthalene	91-20-3	1.4	J	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	100		0.70	1.8	1
10138	Pyrene	129-00-0	130		0.70	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5	1
10401	2,4-DB	94-82-6	0.65	U	0.65	1.8	1
10401	Dicamba	1918-00-9	0.55	U	0.55	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.4	J	0.84	1.8	1
10401	MCPA	94-74-6	290	U	290	290	1
10401	MCPP (Mecoprop)	93-65-2	430	U	430	430	1
10401	2,4,5-T	93-76-5	0.30	U	0.30	0.30	1
10401	2,4,5-TP	93-72-1	0.079	U	0.079	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167477
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL176 SDG#: DE042-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.35	U	0.35	0.87	5
01363	Alpha BHC	319-84-6	0.18	U	0.18	0.87	5
01363	Beta BHC	319-85-7	0.32	U	0.32	0.87	5
01363	Gamma BHC - Lindane	58-89-9	0.18	U	0.18	0.87	5
01363	Chlordane	57-74-9	4.2	U	4.2	18	5
01363	p,p-DDD	72-54-8	3.5	U	3.5	3.5	5
01363	p,p-DDE	72-55-9	6.9	U	6.9	36	100
01363	p,p-DDT	50-29-3	0.35	U	0.35	1.8	5
01363	Delta BHC	319-86-8	0.19	U	0.19	0.87	5
01363	Dieldrin	60-57-1	5.7	U	5.7	5.7	5
01363	Endosulfan I	959-98-8	0.23	U	0.23	0.87	5
01363	Endosulfan II	33213-65-9	8.3	U	8.3	8.3	5
01363	Endosulfan Sulfate	1031-07-8	0.35	U	0.35	1.8	5
01363	Endrin	72-20-8	0.35	U	0.35	1.8	5
01363	Endrin Aldehyde	7421-93-4	6.8	U	6.8	6.8	5
01363	Endrin Ketone	53494-70-5	0.35	U	0.35	1.8	5
01363	Heptachlor	76-44-8	0.46	J	0.32	0.87	5
01363	Heptachlor Epoxide	1024-57-3	7.6	U	7.6	17	100
01363	Methoxychlor	72-43-5	24	U	24	24	5
01363	Mirex	2385-85-5	8.1	U	8.1	8.1	5
01363	Toxaphene	8001-35-2	12	U	12	35	5

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.
Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	260	U	260	870	250
10225	Aroclor 5442	12642-23-8	260	U	260	870	250
10225	Aroclor 5460	11126-42-4	260	U	260	870	250
10225	PCB-1016	12674-11-2	87	U	87	450	250
10225	PCB-1221	11104-28-2	130	U	130	450	250
10225	PCB-1232	11141-16-5	140	U	140	450	250
10225	PCB-1242	53469-21-9	130	U	130	450	250
10225	PCB-1248	12672-29-6	87	U	87	450	250
10225	PCB-1254	11097-69-1	2,900		87	450	250
10225	PCB-1260	11096-82-5	87	U	87	450	250
10225	PCB-1262	37324-23-5	87	U	87	450	250
10225	PCB-1268	11100-14-4	87	U	87	450	250

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,600		5.04	20.0	1
07914	Boron	7440-42-8	3.62	J	0.891	5.01	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167477
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL176 SDG#: DE042-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	7,210		6.14	20.0	1
01654	Iron	7439-89-6	19,600		4.72	20.0	1
01656	Lithium	7439-93-2	13.7		0.22	2.0	1
01657	Magnesium	7439-95-4	3,710		2.54	10.0	1
06958	Manganese	7439-96-5	294		0.0781	0.501	1
10145	Phosphorus	7723-14-0	522		0.561	10.0	1
01662	Potassium	7440-09-7	3,470		18.0	50.1	1
01667	Sodium	7440-23-5	114		37.4	100	1
07968	Strontium	7440-24-6	20.3		0.0621	0.501	1
06969	Tin	7440-31-5	2.12	J	1.00	10.0	1
06970	Titanium	7440-32-6	1,200		0.381	1.00	1
10146	Zirconium	7440-67-7	1.27	J	0.841	5.01	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.192	J	0.0631	0.210	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.93		0.0631	0.421	2
06126	Barium	7440-39-3	169		0.114	0.421	2
06127	Beryllium	7440-41-7	0.495		0.0168	0.105	2
06128	Cadmium	7440-43-9	0.506		0.0379	0.105	2
06131	Chromium	7440-47-3	20.5		0.126	0.421	2
06132	Cobalt	7440-48-4	7.07		0.0210	0.105	2
06133	Copper	7440-50-8	13.2		0.0694	0.421	2
06135	Lead	7439-92-1	37.6		0.0109	0.210	2
06138	Molybdenum	7439-98-7	0.811		0.0526	0.105	2
06139	Nickel	7440-02-0	12.5		0.105	0.421	2
06141	Selenium	7782-49-2	0.0667	J	0.0421	0.421	2
06142	Silver	7440-22-4	0.123		0.0126	0.105	2
06145	Thallium	7440-28-0	0.314		0.0315	0.105	2
06148	Vanadium	7440-62-2	53.2		0.0231	0.105	2
06149	Zinc	7440-66-6	110		0.589	3.15	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0109	J	0.0030	0.104	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6		0.84	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.5	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.90	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167477
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL176 SDG#: DE042-10

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	405	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.84	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	4.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 18:07	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 22:30	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 04:12	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 21:34	Jamie L Brillhart	5
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/26/2011 14:58	Jamie L Brillhart	100
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 02:11	Lindsey K Lafferty	250
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167477
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL176 SDG#: DE042-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:37	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:24	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:35	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205A	01/12/2011 08:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201A	01/13/2011 03:05	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 18:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205A	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201A	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101A	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401A	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167478
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL178 SDG#: DE042-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U	210	640	1
04688	Benzidine	92-87-5	1,500	U	1,500	4,300	1
04688	Benzoic acid	65-85-0	210	U	210	640	1
04688	Benzyl alcohol	100-51-6	210	U	210	640	1
04688	4-Bromophenyl-phenylether	101-55-3	21	U	21	210	1
04688	Carbazole	86-74-8	21	U	21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	43	U	43	210	1
04688	4-Chloroaniline	106-47-8	86	U	86	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U	21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U	21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U	21	210	1
04688	2-Chloronaphthalene	91-58-7	21	U	21	210	1
04688	2-Chlorophenol	95-57-8	21	U	21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	43	U	43	210	1
04688	Dibenzofuran	132-64-9	21	U	21	210	1
04688	1,2-Dichlorobenzene	95-50-1	21	U	21	210	1
04688	1,3-Dichlorobenzene	541-73-1	21	U	21	210	1
04688	1,4-Dichlorobenzene	106-46-7	21	U	21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U	130	430	1
04688	2,4-Dichlorophenol	120-83-2	21	U	21	210	1
04688	2,4-Dimethylphenol	105-67-9	43	U	43	210	1
04688	3,5-Dimethylphenol	108-68-9	43	U	43	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U	210	640	1
04688	2,4-Dinitrophenol	51-28-5	860	U	860	2,600	1
04688	2,4-Dinitrotoluene	121-14-2	43	U	43	210	1
04688	2,6-Dinitrotoluene	606-20-2	21	U	21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	21	U	21	210	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	43	J	21	430	1
04688	Hexachlorobenzene	118-74-1	21	U	21	210	1
04688	Hexachlorobutadiene	87-68-3	86	U	86	210	1
04688	Hexachlorocyclopentadiene	77-47-4	210	U	210	640	1
04688	Hexachloroethane	67-72-1	21	U	21	210	1
04688	Isophorone	78-59-1	21	U	21	210	1
04688	2-Methylphenol	95-48-7	43	U	43	210	1
04688	4-Methylphenol	106-44-5	43	U	43	210	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	21	U	21	210	1
04688	3-Nitroaniline	99-09-2	43	U	43	210	1
04688	4-Nitroaniline	100-01-6	86	U	86	210	1
04688	Nitrobenzene	98-95-3	21	U	21	210	1
04688	2-Nitrophenol	88-75-5	21	U	21	210	1
04688	4-Nitrophenol	100-02-7	210	U	210	640	1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U	21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	21	U	21	210	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	210	U	210	640	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167478
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL178 SDG#: DE042-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	21	U	21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	21	U	21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	43	U	43	210	1
04688	2,4,6-Trichlorophenol	88-06-2	43	U	43	210	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.86	U	0.86	2.1	1
10138	Acenaphthylene	208-96-8	0.43	U	0.43	2.1	1
10138	Anthracene	120-12-7	0.87	J	0.43	2.1	1
10138	Benzo(a)anthracene	56-55-3	6.8		0.86	2.1	1
10138	Benzo(a)pyrene	50-32-8	7.9		0.86	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	15		0.86	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	3.5		0.86	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	5.5		0.86	2.1	1
10138	Butylbenzylphthalate	85-68-7	8.8	J	7.7	23	1
10138	Di-n-butylphthalate	84-74-2	7.7	U	7.7	23	1
10138	Chrysene	218-01-9	14		0.43	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	1.2	J	0.86	2.1	1
10138	Diethylphthalate	84-66-2	7.7	U	7.7	23	1
10138	Dimethylphthalate	131-11-3	7.7	U	7.7	23	1
10138	Fluoranthene	206-44-0	14		0.86	2.1	1
10138	Fluorene	86-73-7	0.86	U	0.86	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.2		0.86	2.1	1
10138	1-Methylnaphthalene	90-12-0	0.86	J	0.86	2.1	1
10138	2-Methylnaphthalene	91-57-6	1.3	J	0.86	2.1	1
10138	Naphthalene	91-20-3	1.2	J	0.86	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	0.86	U	0.86	2.1	1
10138	Di-n-octylphthalate	117-84-0	23	J	7.7	23	1
10138	Phenanthrene	85-01-8	5.9		0.86	2.1	1
10138	Pyrene	129-00-0	12		0.86	2.1	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	2.6	U	2.6	4.6	1
10401	Dalapon	75-99-0	5.6	U	5.6	12	1
10401	2,4-DB	94-82-6	21		0.80	2.2	1
10401	Dicamba	1918-00-9	0.55	J	0.51	1.5	1
10401	Dinoseb	88-85-7	1.0	U	1.0	3.1	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0	U	1.0	2.2	1
10401	MCPA	94-74-6	400		98	320	1
10401	MCPP (Mecoprop)	93-65-2	96	U	96	320	1
10401	2,4,5-T	93-76-5	0.74		0.11	0.22	1
10401	2,4,5-TP	93-72-1	0.096	U	0.096	0.22	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167478
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL178 SDG#: DE042-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.85	U	0.85	2.1	10
01363	Alpha BHC	319-84-6	0.44	U	0.44	2.1	10
01363	Beta BHC	319-85-7	2.1	J	0.77	2.1	10
01363	Gamma BHC - Lindane	58-89-9	0.44	U	0.44	2.1	10
01363	Chlordane	57-74-9	22	U	22	44	10
01363	p,p-DDD	72-54-8	2.2	U	2.2	4.4	10
01363	p,p-DDE	72-55-9	2.8	U	2.8	4.4	10
01363	p,p-DDT	50-29-3	5.1	U	5.1	5.1	10
01363	Delta BHC	319-86-8	0.46	U	0.46	2.1	10
01363	Dieldrin	60-57-1	0.95	U	0.95	4.4	10
01363	Endosulfan I	959-98-8	0.56	U	0.56	2.1	10
01363	Endosulfan II	33213-65-9	2.8	U	2.8	4.4	10
01363	Endosulfan Sulfate	1031-07-8	3.5	U	3.5	4.4	10
01363	Endrin	72-20-8	0.85	U	0.85	4.4	10
01363	Endrin Aldehyde	7421-93-4	3.8	U	3.8	4.4	10
01363	Endrin Ketone	53494-70-5	0.85	U	0.85	4.4	10
01363	Heptachlor	76-44-8	0.77	U	0.77	2.1	10
01363	Heptachlor Epoxide	1024-57-3	1.7	U	1.7	2.1	10
01363	Methoxychlor	72-43-5	4.4	U	4.4	21	10
01363	Mirex	2385-85-5	0.85	U	0.85	4.4	10
01363	Toxaphene	8001-35-2	28	U	28	85	10

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.
Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	13	U	13	42	10
10225	Aroclor 5442	12642-23-8	13	U	13	42	10
10225	Aroclor 5460	11126-42-4	54		13	42	10
10225	PCB-1016	12674-11-2	4.2	U	4.2	22	10
10225	PCB-1221	11104-28-2	6.4	U	6.4	22	10
10225	PCB-1232	11141-16-5	6.7	U	6.7	22	10
10225	PCB-1242	53469-21-9	6.4	U	6.4	22	10
10225	PCB-1248	12672-29-6	4.2	U	4.2	22	10
10225	PCB-1254	11097-69-1	51		4.2	22	10
10225	PCB-1260	11096-82-5	61		4.2	22	10
10225	PCB-1262	37324-23-5	4.2	U	4.2	22	10
10225	PCB-1268	11100-14-4	4.2	U	4.2	22	10

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	21,300		6.27	24.9	1
07914	Boron	7440-42-8	5.32	J	1.11	6.23	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167478
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL178 SDG#: DE042-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	4,530		7.64	24.9	1
01654	Iron	7439-89-6	26,000		5.87	24.9	1
01656	Lithium	7439-93-2	27.2		0.27	2.5	1
01657	Magnesium	7439-95-4	5,300		3.17	12.5	1
06958	Manganese	7439-96-5	395		0.0972	0.623	1
10145	Phosphorus	7723-14-0	500		0.698	12.5	1
01662	Potassium	7440-09-7	3,930		22.4	62.3	1
01667	Sodium	7440-23-5	129		46.5	125	1
07968	Strontium	7440-24-6	28.4		0.0773	0.623	1
06969	Tin	7440-31-5	3.39	J	1.25	12.5	1
06970	Titanium	7440-32-6	1,480		0.474	1.25	1
10146	Zirconium	7440-67-7	1.36	J	1.05	6.23	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.533		0.0763	0.254	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.88		0.0763	0.508	2
06126	Barium	7440-39-3	202		0.137	0.508	2
06127	Beryllium	7440-41-7	1.03		0.0203	0.127	2
06128	Cadmium	7440-43-9	2.39		0.0458	0.127	2
06131	Chromium	7440-47-3	54.6		0.153	0.508	2
06132	Cobalt	7440-48-4	13.1		0.0254	0.127	2
06133	Copper	7440-50-8	32.0		0.0839	0.508	2
06135	Lead	7439-92-1	101		0.0132	0.254	2
06138	Molybdenum	7439-98-7	2.46		0.0635	0.127	2
06139	Nickel	7440-02-0	35.0		0.127	0.508	2
06141	Selenium	7782-49-2	0.183	J	0.0508	0.508	2
06142	Silver	7440-22-4	1.90		0.0153	0.127	2
06145	Thallium	7440-28-0	0.503		0.0381	0.127	2
06148	Vanadium	7440-62-2	69.8		0.0280	0.127	2
06149	Zinc	7440-66-6	474		1.78	9.53	5
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.197		0.0035	0.124	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6		1.0	1.3	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.6	U	11.6	38.5	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	1.9		0.26	1.3	1
	ASTM D1498		**mV**		**mV**	**mV**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167478
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL178 SDG#: DE042-11

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	438	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.36	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	22.1	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 18:36	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 23:02	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 05:35	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 21:48	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 03:44	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167478
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL178 SDG#: DE042-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:40	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:20	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:20	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:26	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:20	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	01/04/2011 13:57	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:36	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 12:09	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 04:37	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 18:26	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167479
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL186 SDG#: DE042-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	72	U	72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U	720	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	45	J	18	360	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U	72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	72	U	72	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	540	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167479
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL186 SDG#: DE042-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.94	J	0.36	1.8	1
10138	Anthracene	120-12-7	2.8		0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	17		0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	13		0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	29		0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	5.3		0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	8.4		0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19	1
10138	Chrysene	218-01-9	26		0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.6	J	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluoranthene	206-44-0	33		0.72	1.8	1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	4.4		0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	1.3	J	0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	1.6	J	0.72	1.8	1
10138	Naphthalene	91-20-3	1.8		0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
10138	Phenanthrene	85-01-8	8.1		0.72	1.8	1
10138	Pyrene	129-00-0	29		0.72	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.7	1
10401	2,4-DB	94-82-6	0.67	U	0.67	1.8	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	2.7	U	2.7	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86	U	0.86	1.8	1
10401	MCPA	94-74-6	290	U	290	290	1
10401	MCPP (Mecoprop)	93-65-2	81	U	81	270	1
10401	2,4,5-T	93-76-5	0.088	U	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.31		0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167479
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL186 SDG#: DE042-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.071	U	0.071	0.18	1
01363	Alpha BHC	319-84-6	0.037	U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.080	J	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037	U	0.037	0.18	1
01363	Chlordane	57-74-9	0.86	U	0.86	3.7	1
01363	p,p-DDD	72-54-8	0.071	U	0.071	0.37	1
01363	p,p-DDE	72-55-9	0.31	U	0.31	0.37	1
01363	p,p-DDT	50-29-3	0.48	U	0.48	0.48	1
01363	Delta BHC	319-86-8	0.039	U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.071	U	0.071	0.37	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.071	U	0.071	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.071	U	0.071	0.37	1
01363	Endrin	72-20-8	0.071	U	0.071	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.071	U	0.071	0.37	1
01363	Endrin Ketone	53494-70-5	0.071	U	0.071	0.37	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.15	U	0.15	0.18	1
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8	1
01363	Mirex	2385-85-5	0.071	U	0.071	0.37	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.1	1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.1	U	2.1	7.1	2
10225	Aroclor 5442	12642-23-8	2.1	U	2.1	7.1	2
10225	Aroclor 5460	11126-42-4	5.0	J	2.1	7.1	2
10225	PCB-1016	12674-11-2	0.71	U	0.71	3.7	2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.7	2
10225	PCB-1232	11141-16-5	1.1	U	1.1	3.7	2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.7	2
10225	PCB-1248	12672-29-6	0.71	U	0.71	3.7	2
10225	PCB-1254	11097-69-1	3.0	J	0.71	3.7	2
10225	PCB-1260	11096-82-5	1.1	J	0.71	3.7	2
10225	PCB-1262	37324-23-5	0.71	U	0.71	3.7	2
10225	PCB-1268	11100-14-4	0.71	U	0.71	3.7	2
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,400		5.30	21.1	1
07914	Boron	7440-42-8	4.32	J	0.937	5.27	1
01650	Calcium	7440-70-2	2,840		6.46	21.1	1
01654	Iron	7439-89-6	21,200		4.96	21.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167479
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL186 SDG#: DE042-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	24.6		0.23	2.1	1
01657	Magnesium	7439-95-4	4,250		2.67	10.5	1
06958	Manganese	7439-96-5	311		0.0821	0.527	1
10145	Phosphorus	7723-14-0	273		0.590	10.5	1
01662	Potassium	7440-09-7	2,940		19.0	52.7	1
01667	Sodium	7440-23-5	104	J	39.3	105	1
07968	Strontium	7440-24-6	23.7		0.0653	0.527	1
06969	Tin	7440-31-5	2.43	J	1.05	10.5	1
06970	Titanium	7440-32-6	1,270		0.400	1.05	1
10146	Zirconium	7440-67-7	1.98	J	0.885	5.27	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.222		0.0614	0.205	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	16.4		0.0614	0.409	2
06126	Barium	7440-39-3	177		0.110	0.409	2
06127	Beryllium	7440-41-7	0.995		0.0164	0.102	2
06128	Cadmium	7440-43-9	0.283		0.0368	0.102	2
06131	Chromium	7440-47-3	34.6		0.123	0.409	2
06132	Cobalt	7440-48-4	9.10		0.0205	0.102	2
06133	Copper	7440-50-8	14.7		0.0675	0.409	2
06135	Lead	7439-92-1	27.1		0.0106	0.205	2
06138	Molybdenum	7439-98-7	1.08		0.0511	0.102	2
06139	Nickel	7440-02-0	21.2		0.102	0.409	2
06141	Selenium	7782-49-2	0.109	J	0.0409	0.409	2
06142	Silver	7440-22-4	0.119		0.0123	0.102	2
06145	Thallium	7440-28-0	0.426		0.0307	0.102	2
06148	Vanadium	7440-62-2	58.8		0.0225	0.102	2
06149	Zinc	7440-66-6	96.3		0.573	3.07	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0212	J	0.0029	0.102	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.5		0.86	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7	U	9.7	32.2	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.88	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	458		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167479
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL186 SDG#: DE042-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.51	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 19:05	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 09:25	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 06:02	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 23:42	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 04:02	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167479
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL186 SDG#: DE042-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:52	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:23	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:23	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:28	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:23	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:37	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 12:23	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 05:00	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 18:42	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167480
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL187 SDG#: DE042-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	81	J	18	350	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167480
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL187 SDG#: DE042-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.71	U	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.71	U	0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.71	U	0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.71	U	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.71	U	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19	1
10138	Chrysene	218-01-9	0.35	U	0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Fluoranthene	206-44-0	0.71	U	0.71	1.8	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	2.1		0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	2.7		0.71	1.8	1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
10138	Phenanthrene	85-01-8	0.71	U	0.71	1.8	1
10138	Pyrene	129-00-0	0.71	U	0.71	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.5	1
10401	2,4-DB	94-82-6	0.66	U	0.66	1.8	1
10401	Dicamba	1918-00-9	0.52	J	0.42	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	910		81	260	1
10401	MCPP (Mecoprop)	93-65-2	590	U	590	590	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.13	U	0.13	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167480
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL187 SDG#: DE042-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.095	U	0.095	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.066	U	0.066	0.18	1
01363	Chlordane	57-74-9	3.4	U	3.4	3.6	1
01363	p,p-DDD	72-54-8	0.37		0.26	0.36	1
01363	p,p-DDE	72-55-9	0.43	U	0.43	0.43	1
01363	p,p-DDT	50-29-3	0.54	U	0.54	0.54	1
01363	Delta BHC	319-86-8	0.43		0.038	0.18	1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.32	U	0.32	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.074	U	0.074	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.34	U	0.34	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	5.6		1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	5.2		0.35	1.8	1
10225	PCB-1260	11096-82-5	4.3		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,600		5.28	21.0	1
07914	Boron	7440-42-8	3.97	J	0.933	5.24	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167480
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL187 SDG#: DE042-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	3,620		6.43	21.0	1
01654	Iron	7439-89-6	17,200		4.94	21.0	1
01656	Lithium	7439-93-2	18.3		0.23	2.1	1
01657	Magnesium	7439-95-4	3,790		2.66	10.5	1
06958	Manganese	7439-96-5	288		0.0818	0.524	1
10145	Phosphorus	7723-14-0	279		0.587	10.5	1
01662	Potassium	7440-09-7	2,560		18.9	52.4	1
01667	Sodium	7440-23-5	110		39.1	105	1
07968	Strontium	7440-24-6	20.6		0.0650	0.524	1
06969	Tin	7440-31-5	2.27	J	1.05	10.5	1
06970	Titanium	7440-32-6	1,120		0.399	1.05	1
10146	Zirconium	7440-67-7	2.18	J	0.881	5.24	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.188	J	0.0636	0.212	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.93		0.0636	0.424	2
06126	Barium	7440-39-3	148		0.114	0.424	2
06127	Beryllium	7440-41-7	0.866		0.0169	0.106	2
06128	Cadmium	7440-43-9	0.356		0.0381	0.106	2
06131	Chromium	7440-47-3	32.7		0.127	0.424	2
06132	Cobalt	7440-48-4	9.70		0.0212	0.106	2
06133	Copper	7440-50-8	13.7		0.0699	0.424	2
06135	Lead	7439-92-1	19.9		0.0110	0.212	2
06138	Molybdenum	7439-98-7	1.26		0.0530	0.106	2
06139	Nickel	7440-02-0	22.2		0.106	0.424	2
06141	Selenium	7782-49-2	0.117	J	0.0424	0.424	2
06142	Silver	7440-22-4	0.0889	J	0.0127	0.106	2
06145	Thallium	7440-28-0	0.408		0.0318	0.106	2
06148	Vanadium	7440-62-2	53.1		0.0233	0.106	2
06149	Zinc	7440-66-6	89.3		0.593	3.18	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0130	J	0.0030	0.104	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.4		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.8	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.69	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167480
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL187 SDG#: DE042-13

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	434	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.78	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.6	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 19:34	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 00:07	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 06:30	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/24/2011 23:57	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 04:21	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167480
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL187 SDG#: DE042-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 17:56	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:32	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:32	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:35	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:32	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:39	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 12:37	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 05:23	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 18:58	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167481
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	72	U	72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U	720	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U	72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	72	U	72	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	540	1
04688	Phenol	108-95-2	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167481
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8	1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.72	U	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.72	U	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.85	J	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.72	U	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19	1
10138	Chrysene	218-01-9	0.96	J	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.4	U	6.4	19	1
10138	Fluoranthene	206-44-0	0.72	U	0.72	1.8	1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	U	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.72	U	0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.72	U	0.72	1.8	1
10138	Naphthalene	91-20-3	0.72	U	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
10138	Phenanthrene	85-01-8	0.72	U	0.72	1.8	1
10138	Pyrene	129-00-0	0.72	U	0.72	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.7	1
10401	2,4-DB	94-82-6	0.67	U	0.67	1.8	1
10401	Dicamba	1918-00-9	0.49	J	0.43	1.3	1
10401	Dinoseb	88-85-7	0.86	U	0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86	U	0.86	1.8	1
10401	MCPA	94-74-6	82	U	82	270	1
10401	MCPP (Mecoprop)	93-65-2	610	U	610	610	1
10401	2,4,5-T	93-76-5	0.088	U	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.081	U	0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167481
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.071	U	0.071	0.18	1
01363	Alpha BHC	319-84-6	0.037	U	0.037	0.18	1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.037	U	0.037	0.18	1
01363	Chlordane	57-74-9	0.86	U	0.86	3.7	1
01363	p,p-DDD	72-54-8	0.17	U	0.17	0.37	1
01363	p,p-DDE	72-55-9	0.34	U	0.34	0.37	1
01363	p,p-DDT	50-29-3	0.071	U	0.071	0.37	1
01363	Delta BHC	319-86-8	0.039	U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.13	U	0.13	0.37	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.071	U	0.071	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.071	U	0.071	0.37	1
01363	Endrin	72-20-8	0.071	U	0.071	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.14	U	0.14	0.37	1
01363	Endrin Ketone	53494-70-5	0.071	U	0.071	0.37	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.037	U	0.037	0.18	1
01363	Methoxychlor	72-43-5	0.37	U	0.37	1.8	1
01363	Mirex	2385-85-5	0.071	U	0.071	0.37	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.1	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	2.7	J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.56	U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	1.3	J	0.35	1.8	1
10225	PCB-1260	11096-82-5	0.86	J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,300		5.15	20.5	1
07914	Boron	7440-42-8	4.10	J	0.910	5.11	1
01650	Calcium	7440-70-2	3,120		6.27	20.5	1
01654	Iron	7439-89-6	18,700		4.82	20.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167481
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	16.5		0.23	2.0	1
01657	Magnesium	7439-95-4	3,360		2.60	10.2	1
06958	Manganese	7439-96-5	340		0.0798	0.511	1
10145	Phosphorus	7723-14-0	242		0.573	10.2	1
01662	Potassium	7440-09-7	2,860		18.4	51.1	1
01667	Sodium	7440-23-5	91.0	J	38.2	102	1
07968	Strontium	7440-24-6	22.9		0.0634	0.511	1
06969	Tin	7440-31-5	2.31	J	1.02	10.2	1
06970	Titanium	7440-32-6	1,170		0.389	1.02	1
10146	Zirconium	7440-67-7	2.16	J	0.859	5.11	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.212	J	0.0644	0.215	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.46		0.0644	0.430	2
06126	Barium	7440-39-3	119		0.116	0.430	2
06127	Beryllium	7440-41-7	0.632		0.0172	0.107	2
06128	Cadmium	7440-43-9	0.230		0.0387	0.107	2
06131	Chromium	7440-47-3	20.4		0.129	0.430	2
06132	Cobalt	7440-48-4	6.54		0.0215	0.107	2
06133	Copper	7440-50-8	10.8		0.0709	0.430	2
06135	Lead	7439-92-1	13.8		0.0112	0.215	2
06138	Molybdenum	7439-98-7	0.839		0.0537	0.107	2
06139	Nickel	7440-02-0	13.8		0.107	0.430	2
06141	Selenium	7782-49-2	0.143	J	0.0430	0.430	2
06142	Silver	7440-22-4	0.100	J	0.0129	0.107	2
06145	Thallium	7440-28-0	0.358		0.0322	0.107	2
06148	Vanadium	7440-62-2	38.0		0.0236	0.107	2
06149	Zinc	7440-66-6	57.3		0.602	3.22	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0030	U	0.0030	0.104	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6		0.86	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7	U	9.7	32.2	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.58	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	448		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167481
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.23	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 12:14	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 14:14	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/01/2011 21:47	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 00:27	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 04:39	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167481
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 16:30	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:25	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	01/04/2011 12:43	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:25	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 12:43	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:25	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:40	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 11:26	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 03:28	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 19:14	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167482
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,600		18	180	1
04688	Acenaphthylene	208-96-8	1,600		18	180	1
04688	Aniline	62-53-3	670		180	540	1
04688	Anthracene	120-12-7	1,700		18	180	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzo(a)anthracene	56-55-3	1,600		18	180	1
04688	Benzo(a)pyrene	50-32-8	1,500		18	180	1
04688	Benzo(b)fluoranthene	205-99-2	1,500		18	180	1
04688	Benzo(g,h,i)perylene	191-24-2	1,400		18	180	1
04688	Benzo(k)fluoranthene	207-08-9	1,400		18	180	1
04688	Benzoic acid	65-85-0	800		180	540	1
04688	Benzyl alcohol	100-51-6	1,700		180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	1,600		18	180	1
04688	Butylbenzylphthalate	85-68-7	1,500		18	180	1
04688	Di-n-butylphthalate	84-74-2	1,800		18	180	1
04688	Carbazole	86-74-8	1,700		18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	1,500		36	180	1
04688	4-Chloroaniline	106-47-8	880		72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,500		18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,600		18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,500		18	180	1
04688	2-Chloronaphthalene	91-58-7	1,300		18	180	1
04688	2-Chlorophenol	95-57-8	1,600		18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,600		36	180	1
04688	Chrysene	218-01-9	1,600		18	180	1
04688	Dibenz(a,h)anthracene	53-70-3	1,500		18	180	1
04688	Dibenzofuran	132-64-9	1,600		18	180	1
04688	1,2-Dichlorobenzene	95-50-1	1,500		18	180	1
04688	1,3-Dichlorobenzene	541-73-1	1,500		18	180	1
04688	1,4-Dichlorobenzene	106-46-7	1,500		18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	940		110	360	1
04688	2,4-Dichlorophenol	120-83-2	1,600		18	180	1
04688	Diethylphthalate	84-66-2	1,500		18	180	1
04688	2,4-Dimethylphenol	105-67-9	1,500		36	180	1
04688	3,5-Dimethylphenol	108-68-9	1,700		36	180	1
04688	Dimethylphthalate	131-11-3	1,600		18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,600		180	540	1
04688	2,4-Dinitrophenol	51-28-5	2,100	J	720	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	1,600		36	180	1
04688	2,6-Dinitrotoluene	606-20-2	1,600		18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	1,600		18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,700		18	360	1
04688	Fluoranthene	206-44-0	2,000		18	180	1
04688	Fluorene	86-73-7	1,600		18	180	1
04688	Hexachlorobenzene	118-74-1	1,700		18	180	1
04688	Hexachlorobutadiene	87-68-3	1,400		72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	3,000		180	540	1
04688	Hexachloroethane	67-72-1	1,400		18	180	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,500		18	180	1
04688	Isophorone	78-59-1	1,500		18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167482
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,600	18	180	1
04688	2-Methylnaphthalene	91-57-6	1,400	18	180	1
04688	2-Methylphenol	95-48-7	1,600	36	180	1
04688	4-Methylphenol	106-44-5	1,700	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,500	18	180	1
04688	2-Nitroaniline	88-74-4	1,700	18	180	1
04688	3-Nitroaniline	99-09-2	1,400	36	180	1
04688	4-Nitroaniline	100-01-6	1,400	72	180	1
04688	Nitrobenzene	98-95-3	1,400	18	180	1
04688	2-Nitrophenol	88-75-5	1,500	18	180	1
04688	4-Nitrophenol	100-02-7	1,100	180	540	1
04688	N-Nitrosodimethylamine	62-75-9	1,700	36	180	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,500	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	1,600	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,500	18	180	1
04688	Pentachlorophenol	87-86-5	1,500	180	540	1
04688	Phenanthrene	85-01-8	1,600	18	180	1
04688	Phenol	108-95-2	1,600	18	180	1
04688	Pyrene	129-00-0	1,400	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,500	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	1,600	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	1,500	36	180	1
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	30	0.72	1.8	1
10138	Acenaphthylene	208-96-8	31	0.36	1.8	1
10138	Anthracene	120-12-7	33	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	33	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	31	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	41	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	16	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	32	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	37	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	37	6.4	19	1
10138	Chrysene	218-01-9	35	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	19	0.72	1.8	1
10138	Diethylphthalate	84-66-2	29	6.4	19	1
10138	Dimethylphthalate	131-11-3	33	6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	60	6.4	19	1
10138	Fluoranthene	206-44-0	38	0.72	1.8	1
10138	Fluorene	86-73-7	33	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	19	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	33	0.72	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167482
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	29		0.72	1.8	1
10138	Naphthalene	91-20-3	32		0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	35		0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	46		6.4	19	1
10138	Phenanthrene	85-01-8	35		0.72	1.8	1
10138	Pyrene	129-00-0	34		0.72	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	8.4		1.3	3.9	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.7	1
10401	2,4-DB	94-82-6	9.7		0.67	1.8	1
10401	Dicamba	1918-00-9	1.1	J	0.43	1.3	1
10401	Dinoseb	88-85-7	0.98	J	0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	10		0.86	1.8	1
10401	MCPA	94-74-6	1,300		82	270	1
10401	MCPP (Mecoprop)	93-65-2	81	U	81	270	1
10401	2,4,5-T	93-76-5	0.74		0.088	0.18	1
10401	2,4,5-TP	93-72-1	1.0		0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.34		0.071	0.18	1
01363	Alpha BHC	319-84-6	0.39		0.037	0.18	1
01363	Beta BHC	319-85-7	0.28		0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.40		0.037	0.18	1
01363	Chlordane	57-74-9	0.86	U	0.86	3.7	1
01363	p,p-DDD	72-54-8	0.70		0.071	0.37	1
01363	p,p-DDE	72-55-9	0.95		0.071	0.37	1
01363	p,p-DDT	50-29-3	0.82		0.071	0.37	1
01363	Delta BHC	319-86-8	0.26		0.039	0.18	1
01363	Dieldrin	60-57-1	0.55		0.071	0.37	1
01363	Endosulfan I	959-98-8	0.24		0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.75		0.071	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.82		0.071	0.37	1
01363	Endrin	72-20-8	0.57		0.071	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.41		0.071	0.37	1
01363	Endrin Ketone	53494-70-5	0.67		0.071	0.37	1
01363	Heptachlor	76-44-8	0.26		0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.37		0.037	0.18	1
01363	Methoxychlor	72-43-5	2.4		0.37	1.8	1
01363	Mirex	2385-85-5	0.16	J	0.071	0.37	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.1	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167482
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	5.3		1.1	3.5	1
10225	PCB-1016	12674-11-2	24		0.35	1.8	1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.56	U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	11		0.35	1.8	1
10225	PCB-1260	11096-82-5	26		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	17,300		5.15	20.5	1
07914	Boron	7440-42-8	194		0.910	5.11	1
01650	Calcium	7440-70-2	3,470		6.27	20.5	1
01654	Iron	7439-89-6	17,800		4.82	20.5	1
01656	Lithium	7439-93-2	119		0.23	2.0	1
01657	Magnesium	7439-95-4	3,680		2.60	10.2	1
06958	Manganese	7439-96-5	371		0.0798	0.511	1
10145	Phosphorus	7723-14-0	307		0.573	10.2	1
01662	Potassium	7440-09-7	4,120		18.4	51.1	1
01667	Sodium	7440-23-5	1,090		38.2	102	1
07968	Strontium	7440-24-6	124		0.0634	0.511	1
06969	Tin	7440-31-5	370		1.02	10.2	1
06970	Titanium	7440-32-6	1,460		0.389	1.02	1
10146	Zirconium	7440-67-7	97.5		0.859	5.11	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.990		0.0632	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	11.7		0.0632	0.421	2
06126	Barium	7440-39-3	182		0.114	0.421	2
06127	Beryllium	7440-41-7	2.22		0.0168	0.105	2
06128	Cadmium	7440-43-9	2.14		0.0379	0.105	2
06131	Chromium	7440-47-3	42.8		0.126	0.421	2
06132	Cobalt	7440-48-4	78.9		0.0211	0.105	2
06133	Copper	7440-50-8	27.3		0.0695	0.421	2
06135	Lead	7439-92-1	23.0		0.0110	0.211	2
06138	Molybdenum	7439-98-7	18.6		0.0527	0.105	2
06139	Nickel	7440-02-0	33.0		0.105	0.421	2
06141	Selenium	7782-49-2	2.05		0.0421	0.421	2
06142	Silver	7440-22-4	17.3		0.0126	0.105	2
06145	Thallium	7440-28-0	1.13		0.0316	0.105	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167482
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06148	Vanadium	7440-62-2	68.4	0.0232	0.105	2
06149	Zinc	7440-66-6	94.6	0.590	3.16	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.195	0.0030	0.106	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.8	0.86	1.1	1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	524	9.7	32.2	1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	35.1	1.1	5.4	5
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 12:43	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 14:47	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/01/2011 22:15	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 00:41	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 04:58	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167482
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 16:42	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:34	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:34	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 12:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:34	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:42	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 11:54	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 04:14	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 19:30	Ashley M Adams	5
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167483
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,600		18	180	1
04688	Acenaphthylene	208-96-8	1,700		18	180	1
04688	Aniline	62-53-3	470	J	180	540	1
04688	Anthracene	120-12-7	1,600		18	180	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzo(a)anthracene	56-55-3	1,700		18	180	1
04688	Benzo(a)pyrene	50-32-8	1,600		18	180	1
04688	Benzo(b)fluoranthene	205-99-2	1,500		18	180	1
04688	Benzo(g,h,i)perylene	191-24-2	1,400		18	180	1
04688	Benzo(k)fluoranthene	207-08-9	1,500		18	180	1
04688	Benzoic acid	65-85-0	350	J	180	540	1
04688	Benzyl alcohol	100-51-6	1,600		180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	1,600		18	180	1
04688	Butylbenzylphthalate	85-68-7	1,500		18	180	1
04688	Di-n-butylphthalate	84-74-2	1,700		18	180	1
04688	Carbazole	86-74-8	1,700		18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	1,500		36	180	1
04688	4-Chloroaniline	106-47-8	780		72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,500		18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,500		18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,400		18	180	1
04688	2-Chloronaphthalene	91-58-7	1,300		18	180	1
04688	2-Chlorophenol	95-57-8	1,600		18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,700		36	180	1
04688	Chrysene	218-01-9	1,700		18	180	1
04688	Dibenz(a,h)anthracene	53-70-3	1,500		18	180	1
04688	Dibenzofuran	132-64-9	1,700		18	180	1
04688	1,2-Dichlorobenzene	95-50-1	1,500		18	180	1
04688	1,3-Dichlorobenzene	541-73-1	1,500		18	180	1
04688	1,4-Dichlorobenzene	106-46-7	1,500		18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	840		110	360	1
04688	2,4-Dichlorophenol	120-83-2	1,600		18	180	1
04688	Diethylphthalate	84-66-2	1,600		18	180	1
04688	2,4-Dimethylphenol	105-67-9	1,300		36	180	1
04688	3,5-Dimethylphenol	108-68-9	1,700		36	180	1
04688	Dimethylphthalate	131-11-3	1,600		18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,400		180	540	1
04688	2,4-Dinitrophenol	51-28-5	1,800	J	720	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	1,700		36	180	1
04688	2,6-Dinitrotoluene	606-20-2	1,700		18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	1,600		18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	1,700		18	360	1
04688	Fluoranthene	206-44-0	1,800		18	180	1
04688	Fluorene	86-73-7	1,600		18	180	1
04688	Hexachlorobenzene	118-74-1	1,700		18	180	1
04688	Hexachlorobutadiene	87-68-3	1,500		72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	3,200		180	540	1
04688	Hexachloroethane	67-72-1	1,400		18	180	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,500		18	180	1
04688	Isophorone	78-59-1	1,500		18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167483
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,600	18	180	1
04688	2-Methylnaphthalene	91-57-6	1,500	18	180	1
04688	2-Methylphenol	95-48-7	1,500	36	180	1
04688	4-Methylphenol	106-44-5	1,600	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,500	18	180	1
04688	2-Nitroaniline	88-74-4	1,700	18	180	1
04688	3-Nitroaniline	99-09-2	1,400	36	180	1
04688	4-Nitroaniline	100-01-6	1,300	72	180	1
04688	Nitrobenzene	98-95-3	1,400	18	180	1
04688	2-Nitrophenol	88-75-5	1,600	18	180	1
04688	4-Nitrophenol	100-02-7	1,100	180	540	1
04688	N-Nitrosodimethylamine	62-75-9	1,700	36	180	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,400	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	1,600	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,500	18	180	1
04688	Pentachlorophenol	87-86-5	1,400	180	540	1
04688	Phenanthrene	85-01-8	1,600	18	180	1
04688	Phenol	108-95-2	1,600	18	180	1
04688	Pyrene	129-00-0	1,500	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,500	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	1,700	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	1,600	36	180	1
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	29	0.72	1.8	1
10138	Acenaphthylene	208-96-8	31	0.36	1.8	1
10138	Anthracene	120-12-7	32	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	33	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	30	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	44	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	17	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	31	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	35	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	37	6.4	19	1
10138	Chrysene	218-01-9	32	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	21	0.72	1.8	1
10138	Diethylphthalate	84-66-2	29	6.4	19	1
10138	Dimethylphthalate	131-11-3	32	6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	41	6.4	19	1
10138	Fluoranthene	206-44-0	34	0.72	1.8	1
10138	Fluorene	86-73-7	32	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	20	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	31	0.72	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167483
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	28		0.72	1.8	1
10138	Naphthalene	91-20-3	30		0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	34		0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	40		6.4	19	1
10138	Phenanthrene	85-01-8	31		0.72	1.8	1
10138	Pyrene	129-00-0	31		0.72	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	6.2		1.3	3.9	1
10401	Dalapon	75-99-0	5.4	J	4.7	9.7	1
10401	2,4-DB	94-82-6	25		0.67	1.8	1
10401	Dicamba	1918-00-9	1.8		0.43	1.3	1
10401	Dinoseb	88-85-7	2.4	J	0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	10		0.86	1.8	1
10401	MCPA	94-74-6	1,400		82	270	1
10401	MCPP (Mecoprop)	93-65-2	990		81	270	1
10401	2,4,5-T	93-76-5	0.97		0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.93		0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.33		0.071	0.18	1
01363	Alpha BHC	319-84-6	0.23		0.037	0.18	1
01363	Beta BHC	319-85-7	0.26		0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.26		0.037	0.18	1
01363	Chlordane	57-74-9	0.86	U	0.86	3.7	1
01363	p,p-DDD	72-54-8	0.72		0.071	0.37	1
01363	p,p-DDE	72-55-9	1.2		0.071	0.37	1
01363	p,p-DDT	50-29-3	0.90		0.071	0.37	1
01363	Delta BHC	319-86-8	0.25		0.039	0.18	1
01363	Dieldrin	60-57-1	0.57		0.071	0.37	1
01363	Endosulfan I	959-98-8	0.26		0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.77		0.071	0.37	1
01363	Endosulfan Sulfate	1031-07-8	0.77		0.071	0.37	1
01363	Endrin	72-20-8	0.57		0.071	0.37	1
01363	Endrin Aldehyde	7421-93-4	0.42		0.071	0.37	1
01363	Endrin Ketone	53494-70-5	0.55		0.071	0.37	1
01363	Heptachlor	76-44-8	0.26		0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.39		0.037	0.18	1
01363	Methoxychlor	72-43-5	2.4		0.37	1.8	1
01363	Mirex	2385-85-5	0.071	U	0.071	0.37	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.1	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167483
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	3.8		1.1	3.5	1
10225	PCB-1016	12674-11-2	20		0.35	1.8	1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.56	U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	8.4		0.35	1.8	1
10225	PCB-1260	11096-82-5	24		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,100		5.25	20.9	1
07914	Boron	7440-42-8	194		0.928	5.21	1
01650	Calcium	7440-70-2	3,690		6.39	20.9	1
01654	Iron	7439-89-6	20,300		4.91	20.9	1
01656	Lithium	7439-93-2	119		0.23	2.1	1
01657	Magnesium	7439-95-4	3,990		2.65	10.4	1
06958	Manganese	7439-96-5	430		0.0813	0.521	1
10145	Phosphorus	7723-14-0	339		0.584	10.4	1
01662	Potassium	7440-09-7	4,360		18.8	52.1	1
01667	Sodium	7440-23-5	1,080		38.9	104	1
07968	Strontium	7440-24-6	125		0.0647	0.521	1
06969	Tin	7440-31-5	372		1.04	10.4	1
06970	Titanium	7440-32-6	1,540		0.396	1.04	1
10146	Zirconium	7440-67-7	98.8		0.876	5.21	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.912		0.0626	0.209	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	11.7		0.0626	0.417	2
06126	Barium	7440-39-3	184		0.113	0.417	2
06127	Beryllium	7440-41-7	2.29		0.0167	0.104	2
06128	Cadmium	7440-43-9	2.09		0.0375	0.104	2
06131	Chromium	7440-47-3	45.2		0.125	0.417	2
06132	Cobalt	7440-48-4	80.7		0.0209	0.104	2
06133	Copper	7440-50-8	28.2		0.0688	0.417	2
06135	Lead	7439-92-1	25.3		0.0108	0.209	2
06138	Molybdenum	7439-98-7	19.3		0.0521	0.104	2
06139	Nickel	7440-02-0	33.8		0.104	0.417	2
06141	Selenium	7782-49-2	2.05		0.0417	0.417	2
06142	Silver	7440-22-4	17.5		0.0125	0.104	2
06145	Thallium	7440-28-0	1.13		0.0313	0.104	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167483
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06148	Vanadium	7440-62-2	70.7	0.0229	0.104	2
06149	Zinc	7440-66-6	97.4	0.584	3.13	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.174	0.0030	0.103	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 13:13	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/06/2011 15:21	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/01/2011 22:42	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 00:56	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 05:17	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167483
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 16:46	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:37	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:37	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 12:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:37	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:43	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167484
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,900		5.35	21.3	1
07914	Boron	7440-42-8	4.06	J	0.946	5.32	1
01650	Calcium	7440-70-2	2,660		6.52	21.3	1
01654	Iron	7439-89-6	16,900		5.01	21.3	1
01656	Lithium	7439-93-2	15.9		0.23	2.1	1
01657	Magnesium	7439-95-4	3,280		2.70	10.6	1
06958	Manganese	7439-96-5	349		0.0830	0.532	1
10145	Phosphorus	7723-14-0	206		0.596	10.6	1
01662	Potassium	7440-09-7	2,780		19.1	53.2	1
01667	Sodium	7440-23-5	87.5	J	39.7	106	1
07968	Strontium	7440-24-6	21.5		0.0659	0.532	1
06969	Tin	7440-31-5	2.28	J	1.06	10.6	1
06970	Titanium	7440-32-6	1,140		0.404	1.06	1
10146	Zirconium	7440-67-7	2.57	J	0.893	5.32	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.233		0.0620	0.207	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.83		0.0620	0.413	2
06126	Barium	7440-39-3	151		0.112	0.413	2
06127	Beryllium	7440-41-7	0.827		0.0165	0.103	2
06128	Cadmium	7440-43-9	0.325		0.0372	0.103	2
06131	Chromium	7440-47-3	27.3		0.124	0.413	2
06132	Cobalt	7440-48-4	8.02		0.0207	0.103	2
06133	Copper	7440-50-8	13.4		0.0682	0.413	2
06135	Lead	7439-92-1	18.2		0.0107	0.207	2
06138	Molybdenum	7439-98-7	0.979		0.0516	0.103	2
06139	Nickel	7440-02-0	17.7		0.103	0.413	2
06141	Selenium	7782-49-2	0.124	J	0.0413	0.413	2
06142	Silver	7440-22-4	0.108		0.0124	0.103	2
06145	Thallium	7440-28-0	0.418		0.0310	0.103	2
06148	Vanadium	7440-62-2	48.5		0.0227	0.103	2
06149	Zinc	7440-66-6	77.8		0.578	3.10	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0029	U	0.0029	0.102	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5		0.86	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7	U	9.7	32.2	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.57	J	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167484
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14DUP

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	463	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.14	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3		n.a.	6.9	0.50	0.50	1
11626	28a Moisture Content by 160.3		n.a.	6.8	0.50	0.50	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 16:38	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 15:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167484
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL189 SDG#: DE042-14DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 15:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 12:48	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 15:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:41	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 11:40	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 03:51	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 20:34	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167485
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL192 SDG#: DE042-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	72	U	72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U	720	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	47	J	18	360	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U	72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	72	U	72	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	540	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167485
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL192 SDG#: DE042-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.44	J	0.36	1.8	1
10138	Anthracene	120-12-7	1.1	J	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	4.9		0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	4.8		0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	8.3		0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	2.6		0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	2.8		0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	19	1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	19	1
10138	Chrysene	218-01-9	8.0		0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	J	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	19	1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	19	1
10138	Fluoranthene	206-44-0	13		0.72	1.8	1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.7	J	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	1.9		0.72	1.8	1
10138	2-Methylnaphthalene	91-57-6	2.1		0.72	1.8	1
10138	Naphthalene	91-20-3	1.8	J	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	19	1
10138	Phenanthrene	85-01-8	8.2		0.72	1.8	1
10138	Pyrene	129-00-0	9.3		0.72	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.7	1
10401	2,4-DB	94-82-6	14	U	14	14	1
10401	Dicamba	1918-00-9	0.84	J	0.43	1.3	1
10401	Dinoseb	88-85-7	1.8	U	1.8	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86	U	0.86	1.8	1
10401	MCPA	94-74-6	82	U	82	270	1
10401	MCPP (Mecoprop)	93-65-2	470	U	470	470	1
10401	2,4,5-T	93-76-5	0.088	U	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.081	U	0.081	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167485
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL192 SDG#: DE042-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.36	U	0.36	0.89	5
01363	Alpha BHC	319-84-6	0.18	U	0.18	0.89	5
01363	Beta BHC	319-85-7	0.32	U	0.32	0.89	5
01363	Gamma BHC - Lindane	58-89-9	0.18	U	0.18	0.89	5
01363	Chlordane	57-74-9	4.3	U	4.3	18	5
01363	p,p-DDD	72-54-8	0.36	U	0.36	1.8	5
01363	p,p-DDE	72-55-9	0.40	U	0.40	1.8	5
01363	p,p-DDT	50-29-3	0.36	U	0.36	1.8	5
01363	Delta BHC	319-86-8	0.19	U	0.19	0.89	5
01363	Dieldrin	60-57-1	0.36	U	0.36	1.8	5
01363	Endosulfan I	959-98-8	0.24	U	0.24	0.89	5
01363	Endosulfan II	33213-65-9	0.36	U	0.36	1.8	5
01363	Endosulfan Sulfate	1031-07-8	0.36	U	0.36	1.8	5
01363	Endrin	72-20-8	0.36	U	0.36	1.8	5
01363	Endrin Aldehyde	7421-93-4	0.36	U	0.36	1.8	5
01363	Endrin Ketone	53494-70-5	0.36	U	0.36	1.8	5
01363	Heptachlor	76-44-8	0.32	U	0.32	0.89	5
01363	Heptachlor Epoxide	1024-57-3	0.18	U	0.18	0.89	5
01363	Methoxychlor	72-43-5	1.8	U	1.8	8.9	5
01363	Mirex	2385-85-5	0.36	U	0.36	1.8	5
01363	Toxaphene	8001-35-2	12	U	12	36	5

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.
Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	5.4	U	5.4	18	5
10225	Aroclor 5442	12642-23-8	5.4	U	5.4	18	5
10225	Aroclor 5460	11126-42-4	5.4	U	5.4	18	5
10225	PCB-1016	12674-11-2	1.8	U	1.8	9.1	5
10225	PCB-1221	11104-28-2	2.7	U	2.7	9.1	5
10225	PCB-1232	11141-16-5	2.8	U	2.8	9.1	5
10225	PCB-1242	53469-21-9	2.7	U	2.7	9.1	5
10225	PCB-1248	12672-29-6	1.8	U	1.8	9.1	5
10225	PCB-1254	11097-69-1	3.3	J	1.8	9.1	5
10225	PCB-1260	11096-82-5	5.5	J	1.8	9.1	5
10225	PCB-1262	37324-23-5	1.8	U	1.8	9.1	5
10225	PCB-1268	11100-14-4	1.8	U	1.8	9.1	5

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.
Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.

Metals	**SW-846 6010B**	mg/kg	mg/kg	mg/kg	

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167485
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL192 SDG#: DE042-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,600		5.16	20.5	1
07914	Boron	7440-42-8	3.00	J	0.912	5.13	1
01650	Calcium	7440-70-2	3,140		6.28	20.5	1
01654	Iron	7439-89-6	17,600		4.83	20.5	1
01656	Lithium	7439-93-2	18.4		0.23	2.1	1
01657	Magnesium	7439-95-4	4,110		2.60	10.3	1
06958	Manganese	7439-96-5	223		0.0800	0.513	1
10145	Phosphorus	7723-14-0	316		0.574	10.3	1
01662	Potassium	7440-09-7	2,680		18.5	51.3	1
01667	Sodium	7440-23-5	86.3	J	38.2	103	1
07968	Strontium	7440-24-6	21.2		0.0636	0.513	1
06969	Tin	7440-31-5	2.02	J	1.03	10.3	1
06970	Titanium	7440-32-6	859		0.390	1.03	1
10146	Zirconium	7440-67-7	1.38	J	0.861	5.13	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.247		0.0615	0.205	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	15.1		0.0615	0.410	2
06126	Barium	7440-39-3	166		0.111	0.410	2
06127	Beryllium	7440-41-7	0.846		0.0164	0.103	2
06128	Cadmium	7440-43-9	0.507		0.0369	0.103	2
06131	Chromium	7440-47-3	33.2		0.123	0.410	2
06132	Cobalt	7440-48-4	8.86		0.0205	0.103	2
06133	Copper	7440-50-8	17.3		0.0677	0.410	2
06135	Lead	7439-92-1	16.4		0.0107	0.205	2
06138	Molybdenum	7439-98-7	0.936		0.0513	0.103	2
06139	Nickel	7440-02-0	21.8		0.103	0.410	2
06141	Selenium	7782-49-2	0.118	J	0.0410	0.410	2
06142	Silver	7440-22-4	0.121		0.0123	0.103	2
06145	Thallium	7440-28-0	0.424		0.0308	0.103	2
06148	Vanadium	7440-62-2	56.9		0.0226	0.103	2
06149	Zinc	7440-66-6	129		0.574	3.08	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.321		0.0031	0.108	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	5.1		0.86	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7	U	9.7	32.3	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	2.5		0.22	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167485
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL192 SDG#: DE042-15

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	466	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.12	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	7.1	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 20:03	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 09:57	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 06:57	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 01:25	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 05:35	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167485
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL192 SDG#: DE042-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 18:00	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:35	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:35	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:38	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:35	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:44	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 13:20	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 05:46	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 20:50	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167486
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL194 SDG#: DE042-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzoic acid	65-85-0	180	U	180	550	1
04688	Benzyl alcohol	100-51-6	180	U	180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180	1
04688	4-Chloroaniline	106-47-8	74	U	74	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
04688	2,4-Dinitrophenol	51-28-5	740	U	740	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	20	J	18	370	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	74	U	74	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	37	U	37	180	1
04688	4-Methylphenol	106-44-5	37	U	37	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	37	U	37	180	1
04688	4-Nitroaniline	100-01-6	74	U	74	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	550	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167486
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL194 SDG#: DE042-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.74	U	0.74	1.8	1
10138	Acenaphthylene	208-96-8	0.45	J	0.37	1.8	1
10138	Anthracene	120-12-7	1.2	J	0.37	1.8	1
10138	Benzo(a)anthracene	56-55-3	3.6		0.74	1.8	1
10138	Benzo(a)pyrene	50-32-8	7.3		0.74	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	18		0.74	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	11		0.74	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	4.3		0.74	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.7	U	6.7	20	1
10138	Di-n-butylphthalate	84-74-2	6.7	U	6.7	20	1
10138	Chrysene	218-01-9	8.1		0.37	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	1.5	J	0.74	1.8	1
10138	Diethylphthalate	84-66-2	6.7	U	6.7	20	1
10138	Dimethylphthalate	131-11-3	6.7	U	6.7	20	1
10138	Fluoranthene	206-44-0	8.9		0.74	1.8	1
10138	Fluorene	86-73-7	0.74	U	0.74	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	12		0.74	1.8	1
10138	1-Methylnaphthalene	90-12-0	2.3		0.74	1.8	1
10138	2-Methylnaphthalene	91-57-6	2.5		0.74	1.8	1
10138	Naphthalene	91-20-3	2.3		0.74	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.74	U	0.74	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.7	U	6.7	20	1
10138	Phenanthrene	85-01-8	6.4		0.74	1.8	1
10138	Pyrene	129-00-0	7.3		0.74	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0	1
10401	Dalapon	75-99-0	4.9	U	4.9	10	1
10401	2,4-DB	94-82-6	23	U	23	23	1
10401	Dicamba	1918-00-9	0.46	J	0.44	1.3	1
10401	Dinoseb	88-85-7	0.89	U	0.89	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	3.0	U	3.0	3.0	1
10401	MCPA	94-74-6	180	U	180	280	1
10401	MCPP (Mecoprop)	93-65-2	590	U	590	590	1
10401	2,4,5-T	93-76-5	0.091	U	0.091	0.19	1
10401	2,4,5-TP	93-72-1	0.083	U	0.083	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167486
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL194 SDG#: DE042-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.073	U	0.073	0.18	1
01363	Alpha BHC	319-84-6	0.14	J	0.038	0.18	1
01363	Beta BHC	319-85-7	0.067	U	0.067	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.038	U	0.038	0.18	1
01363	Chlordane	57-74-9	5.0	U	5.0	5.0	1
01363	p,p-DDD	72-54-8	0.23	U	0.23	0.38	1
01363	p,p-DDE	72-55-9	0.29	U	0.29	0.38	1
01363	p,p-DDT	50-29-3	0.51	U	0.51	0.51	1
01363	Delta BHC	319-86-8	0.040	U	0.040	0.18	1
01363	Dieldrin	60-57-1	0.073	U	0.073	0.38	1
01363	Endosulfan I	959-98-8	0.049	U	0.049	0.18	1
01363	Endosulfan II	33213-65-9	0.080	U	0.080	0.38	1
01363	Endosulfan Sulfate	1031-07-8	0.073	U	0.073	0.38	1
01363	Endrin	72-20-8	0.073	U	0.073	0.38	1
01363	Endrin Aldehyde	7421-93-4	0.23	U	0.23	0.38	1
01363	Endrin Ketone	53494-70-5	0.13	U	0.13	0.38	1
01363	Heptachlor	76-44-8	0.44	U	0.44	0.44	1
01363	Heptachlor Epoxide	1024-57-3	0.065	U	0.065	0.18	1
01363	Methoxychlor	72-43-5	0.38	U	0.38	1.8	1
01363	Mirex	2385-85-5	0.13	U	0.13	0.38	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.3	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	3.0	J	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9	1
10225	PCB-1232	11141-16-5	0.58	U	0.58	1.9	1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9	1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9	1
10225	PCB-1254	11097-69-1	9.5		0.37	1.9	1
10225	PCB-1260	11096-82-5	3.9		0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,800		5.47	21.7	1
07914	Boron	7440-42-8	3.76	J	0.967	5.43	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167486
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL194 SDG#: DE042-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	3,060		6.66	21.7	1
01654	Iron	7439-89-6	19,600		5.12	21.7	1
01656	Lithium	7439-93-2	19.6		0.24	2.2	1
01657	Magnesium	7439-95-4	4,200		2.76	10.9	1
06958	Manganese	7439-96-5	290		0.0848	0.543	1
10145	Phosphorus	7723-14-0	348		0.609	10.9	1
01662	Potassium	7440-09-7	3,010		19.6	54.3	1
01667	Sodium	7440-23-5	98.5	J	40.5	109	1
07968	Strontium	7440-24-6	21.6		0.0674	0.543	1
06969	Tin	7440-31-5	2.67	J	1.09	10.9	1
06970	Titanium	7440-32-6	1,210		0.413	1.09	1
10146	Zirconium	7440-67-7	1.63	J	0.913	5.43	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.209	J	0.0646	0.215	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.02		0.0646	0.431	2
06126	Barium	7440-39-3	156		0.116	0.431	2
06127	Beryllium	7440-41-7	0.881		0.0172	0.108	2
06128	Cadmium	7440-43-9	0.261		0.0387	0.108	2
06131	Chromium	7440-47-3	29.1		0.129	0.431	2
06132	Cobalt	7440-48-4	8.37		0.0215	0.108	2
06133	Copper	7440-50-8	12.5		0.0710	0.431	2
06135	Lead	7439-92-1	14.2		0.0112	0.215	2
06138	Molybdenum	7439-98-7	0.752		0.0538	0.108	2
06139	Nickel	7440-02-0	17.2		0.108	0.431	2
06141	Selenium	7782-49-2	0.132	J	0.0431	0.431	2
06142	Silver	7440-22-4	0.0775	J	0.0129	0.108	2
06145	Thallium	7440-28-0	0.391		0.0323	0.108	2
06148	Vanadium	7440-62-2	56.3		0.0237	0.108	2
06149	Zinc	7440-66-6	90.8		0.603	3.23	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.101	J	0.0029	0.103	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6		0.89	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10	U	10	33.3	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.36	J	0.22	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167486
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL194 SDG#: DE042-16

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	451	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.19	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	9.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 20:33	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 10:29	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 07:25	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 01:40	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 05:54	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167486
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL194 SDG#: DE042-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 18:04	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:38	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:38	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:40	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:38	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:48	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 13:34	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 06:09	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 21:06	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167487
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL196 SDG#: DE042-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	70	U	70	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	700	U	700	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	70	U	70	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	70	U	70	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1
04688	Phenol	108-95-2	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167487
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL196 SDG#: DE042-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.70	U	0.70	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.41	J	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	2.4		0.70	1.8	1
10138	Benzo(a)pyrene	50-32-8	3.0		0.70	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	4.5		0.70	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	1.4	J	0.70	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	1.8		0.70	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.3	U	6.3	19	1
10138	Di-n-butylphthalate	84-74-2	6.3	U	6.3	19	1
10138	Chrysene	218-01-9	4.2		0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.70	U	0.70	1.8	1
10138	Diethylphthalate	84-66-2	6.3	U	6.3	19	1
10138	Dimethylphthalate	131-11-3	6.3	U	6.3	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	8.3	J	6.3	19	1
10138	Fluoranthene	206-44-0	5.0		0.70	1.8	1
10138	Fluorene	86-73-7	0.70	U	0.70	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.93	J	0.70	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.96	J	0.70	1.8	1
10138	2-Methylnaphthalene	91-57-6	1.1	J	0.70	1.8	1
10138	Naphthalene	91-20-3	0.96	J	0.70	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.70	U	0.70	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.3	U	6.3	19	1
10138	Phenanthrene	85-01-8	4.5		0.70	1.8	1
10138	Pyrene	129-00-0	4.6		0.70	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.6	U	4.6	9.5	1
10401	2,4-DB	94-82-6	22	U	22	22	1
10401	Dicamba	1918-00-9	0.42	U	0.42	1.3	1
10401	Dinoseb	88-85-7	0.84	U	0.84	2.5	1
10401	2,4-DP (Dichlorprop)	120-36-5	4.1	U	4.1	4.1	1
10401	MCPA	94-74-6	80	U	80	260	1
10401	MCPP (Mecoprop)	93-65-2	560	U	560	560	1
10401	2,4,5-T	93-76-5	0.086	U	0.086	0.18	1
10401	2,4,5-TP	93-72-1	0.27	U	0.27	0.27	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167487
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL196 SDG#: DE042-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
attained.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.084	J	0.070	0.17	1
01363	Alpha BHC	319-84-6	0.043	J	0.036	0.17	1
01363	Beta BHC	319-85-7	0.063	U	0.063	0.17	1
01363	Gamma BHC - Lindane	58-89-9	0.048	J	0.036	0.17	1
01363	Chlordane	57-74-9	0.84	U	0.84	3.6	1
01363	p,p-DDD	72-54-8	0.13	U	0.13	0.36	1
01363	p,p-DDE	72-55-9	0.43	U	0.43	0.43	1
01363	p,p-DDT	50-29-3	0.48	U	0.48	0.48	1
01363	Delta BHC	319-86-8	0.12	U	0.12	0.17	1
01363	Dieldrin	60-57-1	0.070	U	0.070	0.36	1
01363	Endosulfan I	959-98-8	0.081	U	0.081	0.17	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070	U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.37	U	0.37	0.37	1
01363	Heptachlor	76-44-8	0.063	U	0.063	0.17	1
01363	Heptachlor Epoxide	1024-57-3	0.40	U	0.40	0.40	1
01363	Methoxychlor	72-43-5	0.67	U	0.67	1.7	1
01363	Mirex	2385-85-5	0.87	U	0.87	0.87	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	6.1		1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	20		0.35	1.8	1
10225	PCB-1260	11096-82-5	4.8		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,100		5.05	20.1	1
07914	Boron	7440-42-8	3.62	J	0.893	5.02	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167487
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL196 SDG#: DE042-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	2,860		6.15	20.1	1
01654	Iron	7439-89-6	20,400		4.73	20.1	1
01656	Lithium	7439-93-2	17.8		0.22	2.0	1
01657	Magnesium	7439-95-4	3,870		2.55	10.0	1
06958	Manganese	7439-96-5	352		0.0783	0.502	1
10145	Phosphorus	7723-14-0	325		0.562	10.0	1
01662	Potassium	7440-09-7	3,510		18.1	50.2	1
01667	Sodium	7440-23-5	104		37.4	100	1
07968	Strontium	7440-24-6	29.4		0.0622	0.502	1
06969	Tin	7440-31-5	2.24	J	1.00	10.0	1
06970	Titanium	7440-32-6	1,190		0.381	1.00	1
10146	Zirconium	7440-67-7	2.34	J	0.843	5.02	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.206		0.0602	0.201	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	11.1		0.0602	0.401	2
06126	Barium	7440-39-3	178		0.108	0.401	2
06127	Beryllium	7440-41-7	0.974		0.0161	0.100	2
06128	Cadmium	7440-43-9	0.407		0.0361	0.100	2
06131	Chromium	7440-47-3	29.6		0.120	0.401	2
06132	Cobalt	7440-48-4	11.8		0.0201	0.100	2
06133	Copper	7440-50-8	14.4		0.0662	0.401	2
06135	Lead	7439-92-1	16.6		0.0104	0.201	2
06138	Molybdenum	7439-98-7	1.35		0.0502	0.100	2
06139	Nickel	7440-02-0	19.0		0.100	0.401	2
06141	Selenium	7782-49-2	0.135	J	0.0401	0.401	2
06142	Silver	7440-22-4	0.105		0.0120	0.100	2
06145	Thallium	7440-28-0	0.410		0.0301	0.100	2
06148	Vanadium	7440-62-2	55.6		0.0221	0.100	2
06149	Zinc	7440-66-6	91.8		0.562	3.01	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0267	J	0.0028	0.0989	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4		0.84	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.5	U	9.5	31.6	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.72	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	

*=This limit was used in the evaluation of the final result

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167487
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL196 SDG#: DE042-17

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	471	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.02	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	5.1	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/19/2011 21:02	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 01:43	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 07:52	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 01:55	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 06:12	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167487
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL196 SDG#: DE042-17

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 18:08	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:41	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:41	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:43	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:41	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:49	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 13:48	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 06:32	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 21:22	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167488
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL198 SDG#: DE042-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Butylbenzylphthalate	85-68-7	18	U	18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	Diethylphthalate	84-66-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	Dimethylphthalate	131-11-3	18	U	18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	360	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167488
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL198 SDG#: DE042-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	18	U	18	180	1
04688	Pentachlorophenol	87-86-5	180	U	180	530	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.6	U	3.6	8.9	5
10138	Acenaphthylene	208-96-8	1.8	U	1.8	8.9	5
10138	Anthracene	120-12-7	1.8	U	1.8	8.9	5
10138	Benzo(a)anthracene	56-55-3	3.9	J	3.6	8.9	5
10138	Benzo(a)pyrene	50-32-8	8.6	J	3.6	8.9	5
10138	Benzo(b)fluoranthene	205-99-2	24		3.6	8.9	5
10138	Benzo(g,h,i)perylene	191-24-2	15		3.6	8.9	5
10138	Benzo(k)fluoranthene	207-08-9	3.6	U	3.6	8.9	5
10138	Chrysene	218-01-9	14		1.8	8.9	5
10138	Dibenz(a,h)anthracene	53-70-3	7.6	J	3.6	8.9	5
10138	Fluoranthene	206-44-0	4.5	J	3.6	8.9	5
10138	Fluorene	86-73-7	3.6	U	3.6	8.9	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	9.6		3.6	8.9	5
10138	1-Methylnaphthalene	90-12-0	3.6	U	3.6	8.9	5
10138	2-Methylnaphthalene	91-57-6	3.6	U	3.6	8.9	5
10138	Naphthalene	91-20-3	3.6	U	3.6	8.9	5
10138	N-Nitrosodimethylamine	62-75-9	3.6	U	3.6	8.9	5
10138	Phenanthrene	85-01-8	4.7	J	3.6	8.9	5
10138	Pyrene	129-00-0	4.4	J	3.6	8.9	5
	Reporting limits were raised due to interference from the sample matrix.						
	Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	17	U	17	17	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	81	U	81	270	1
10401	MCPP (Mecoprop)	93-65-2	540	U	540	540	1
10401	2,4,5-T	93-76-5	0.088	U	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.41	U	0.41	0.41	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory						

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167488
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL198 SDG#: DE042-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	statistical limits of 0-36%, the data is reported.						
	Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.071	U	0.071	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.14	J	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.30	U	0.30	0.36	1
01363	p,p-DDE	72-55-9	0.071	U	0.071	0.36	1
01363	p,p-DDT	50-29-3	0.41	U	0.41	0.41	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.071	U	0.071	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.13	U	0.13	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.071	U	0.071	0.36	1
01363	Endrin	72-20-8	0.071	U	0.071	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.071	U	0.071	0.36	1
01363	Endrin Ketone	53494-70-5	0.071	U	0.071	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.17	U	0.17	0.18	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	1.3	U	1.3	1.3	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.1	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	3.2	J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8	1
10225	PCB-1232	11141-16-5	0.56	U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8	1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8	1
10225	PCB-1254	11097-69-1	5.5		0.35	1.8	1
10225	PCB-1260	11096-82-5	2.6		0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167488
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL198 SDG#: DE042-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,900		5.17	20.5	1
07914	Boron	7440-42-8	4.82	J	0.914	5.14	1
01650	Calcium	7440-70-2	3,690		6.30	20.5	1
01654	Iron	7439-89-6	17,900		4.84	20.5	1
01656	Lithium	7439-93-2	17.2		0.23	2.1	1
01657	Magnesium	7439-95-4	3,670		2.61	10.3	1
06958	Manganese	7439-96-5	305		0.0801	0.514	1
10145	Phosphorus	7723-14-0	332		0.575	10.3	1
01662	Potassium	7440-09-7	3,150		18.5	51.4	1
01667	Sodium	7440-23-5	96.2	J	38.3	103	1
07968	Strontium	7440-24-6	22.6		0.0637	0.514	1
06969	Tin	7440-31-5	2.30	J	1.03	10.3	1
06970	Titanium	7440-32-6	1,130		0.390	1.03	1
10146	Zirconium	7440-67-7	1.81	J	0.863	5.14	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.530		0.0628	0.209	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	12.8		0.0628	0.419	2
06126	Barium	7440-39-3	158		0.113	0.419	2
06127	Beryllium	7440-41-7	0.799		0.0168	0.105	2
06128	Cadmium	7440-43-9	1.33		0.0377	0.105	2
06131	Chromium	7440-47-3	38.6		0.126	0.419	2
06132	Cobalt	7440-48-4	33.3		0.0209	0.105	2
06133	Copper	7440-50-8	102		0.0691	0.419	2
06135	Lead	7439-92-1	59.0		0.0109	0.209	2
06138	Molybdenum	7439-98-7	2.73		0.0524	0.105	2
06139	Nickel	7440-02-0	36.3		0.105	0.419	2
06141	Selenium	7782-49-2	0.126	J	0.0419	0.419	2
06142	Silver	7440-22-4	0.146		0.0126	0.105	2
06145	Thallium	7440-28-0	0.422		0.0314	0.105	2
06148	Vanadium	7440-62-2	55.3		0.0230	0.105	2
06149	Zinc	7440-66-6	188		0.587	3.14	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0108	J	0.0028	0.0992	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.2		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	32.1	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.70	J	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167488
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL198 SDG#: DE042-18

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	475	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.56	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	6.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/20/2011 17:35	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 11:02	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 08:20	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 02:10	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 06:31	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167488
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL198 SDG#: DE042-18

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 18:12	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:45	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:51	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 14:02	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 07:19	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 21:38	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167489
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL199 SDG#: DE042-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	530	1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500	1
04688	Benzoic acid	65-85-0	180	U	180	530	1
04688	Benzyl alcohol	100-51-6	180	U	180	530	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180	1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	35	U	35	180	1
04688	4-Methylphenol	106-44-5	35	U	35	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	35	U	35	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	530	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	530	1
04688	Phenol	108-95-2	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167489
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL199 SDG#: DE042-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180	1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8	1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8	1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8	1
10138	Benzo(a)anthracene	56-55-3	1.3	J	0.71	1.8	1
10138	Benzo(a)pyrene	50-32-8	2.0		0.71	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	3.2		0.71	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	1.4	J	0.71	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	1.0	J	0.71	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.4	U	6.4	19	1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19	1
10138	Chrysene	218-01-9	2.6		0.35	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8	1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19	1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	8.5	J	6.4	19	1
10138	Fluoranthene	206-44-0	1.8		0.71	1.8	1
10138	Fluorene	86-73-7	0.71	U	0.71	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.94	J	0.71	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8	1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8	1
10138	Naphthalene	91-20-3	0.77	J	0.71	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8	1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19	1
10138	Phenanthrene	85-01-8	1.2	J	0.71	1.8	1
10138	Pyrene	129-00-0	1.7	J	0.71	1.8	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	0.66	U	0.66	1.8	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8	1
10401	MCPA	94-74-6	570		81	270	1
10401	MCPP (Mecoprop)	93-65-2	220	J	80	270	1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167489
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL199 SDG#: DE042-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Beta BHC	319-85-7	0.27	U	0.27	0.27	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6	1
01363	p,p-DDD	72-54-8	0.070	U	0.070	0.36	1
01363	p,p-DDE	72-55-9	0.38	U	0.38	0.38	1
01363	p,p-DDT	50-29-3	0.73	U	0.73	0.73	1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18	1
01363	Dieldrin	60-57-1	0.24	U	0.24	0.36	1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18	1
01363	Endosulfan II	33213-65-9	0.070	U	0.070	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36	1
01363	Endrin	72-20-8	0.070	U	0.070	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.070	U	0.070	0.36	1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.21	U	0.21	0.21	1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8	1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36	1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.1	U	2.1	7.0	2
10225	Aroclor 5442	12642-23-8	2.1	U	2.1	7.0	2
10225	Aroclor 5460	11126-42-4	9.9		2.1	7.0	2
10225	PCB-1016	12674-11-2	0.70	U	0.70	3.6	2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.6	2
10225	PCB-1232	11141-16-5	1.1	U	1.1	3.6	2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.6	2
10225	PCB-1248	12672-29-6	0.70	U	0.70	3.6	2
10225	PCB-1254	11097-69-1	7.8		0.70	3.6	2
10225	PCB-1260	11096-82-5	13		0.70	3.6	2
10225	PCB-1262	37324-23-5	0.70	U	0.70	3.6	2
10225	PCB-1268	11100-14-4	0.70	U	0.70	3.6	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,400		5.35	21.3	1
07914	Boron	7440-42-8	4.89	J	0.947	5.32	1
01650	Calcium	7440-70-2	4,040		6.52	21.3	1
01654	Iron	7439-89-6	20,000		5.01	21.3	1
01656	Lithium	7439-93-2	19.2		0.23	2.1	1
01657	Magnesium	7439-95-4	4,360		2.70	10.6	1
06958	Manganese	7439-96-5	346		0.0830	0.532	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167489
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL199 SDG#: DE042-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
10145	Phosphorus	7723-14-0	300		0.596	10.6	1
01662	Potassium	7440-09-7	3,260		19.1	53.2	1
01667	Sodium	7440-23-5	93.2	J	39.7	106	1
07968	Strontium	7440-24-6	22.4		0.0660	0.532	1
06969	Tin	7440-31-5	2.28	J	1.06	10.6	1
06970	Titanium	7440-32-6	1,160		0.404	1.06	1
10146	Zirconium	7440-67-7	1.53	J	0.894	5.32	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.157	J	0.0632	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	9.33		0.0632	0.421	2
06126	Barium	7440-39-3	142		0.114	0.421	2
06127	Beryllium	7440-41-7	0.742		0.0169	0.105	2
06128	Cadmium	7440-43-9	0.517		0.0379	0.105	2
06131	Chromium	7440-47-3	29.9		0.126	0.421	2
06132	Cobalt	7440-48-4	10.0		0.0211	0.105	2
06133	Copper	7440-50-8	25.4		0.0695	0.421	2
06135	Lead	7439-92-1	22.0		0.0110	0.211	2
06138	Molybdenum	7439-98-7	1.15		0.0527	0.105	2
06139	Nickel	7440-02-0	23.3		0.105	0.421	2
06141	Selenium	7782-49-2	0.204	J	0.0421	0.421	2
06142	Silver	7440-22-4	0.0725	J	0.0126	0.105	2
06145	Thallium	7440-28-0	0.424		0.0316	0.105	2
06148	Vanadium	7440-62-2	50.1		0.0232	0.105	2
06149	Zinc	7440-66-6	82.9		0.590	3.16	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0067	J	0.0029	0.100	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.8		0.85	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	31.9	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.76	J	0.21	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	413		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167489
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL199 SDG#: DE042-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.62	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	6.0	0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/20/2011 18:03	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 11:34	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 08:47	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 02:25	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 06:49	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167489
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL199 SDG#: DE042-19

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 18:16	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:47	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:47	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:47	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:47	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:52	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 14:16	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 07:42	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 21:54	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167490
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL202 SDG#: DE042-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Butylbenzylphthalate	85-68-7	18	U	18	180	1
04688	Di-n-butylphthalate	84-74-2	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	71	U	71	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	Diethylphthalate	84-66-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	Dimethylphthalate	131-11-3	18	U	18	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	18	U	18	360	1
04688	Fluoranthene	206-44-0	59	J	18	180	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	71	U	71	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167490
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL202 SDG#: DE042-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	18	U	18	180	1
04688	Pentachlorophenol	87-86-5	180	U	180	540	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	Pyrene	129-00-0	57	J	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.6	U	3.6	8.9	5
10138	Acenaphthylene	208-96-8	1.8	U	1.8	8.9	5
10138	Anthracene	120-12-7	1.8	U	1.8	8.9	5
10138	Benzo(a)anthracene	56-55-3	6.4	J	3.6	8.9	5
10138	Benzo(a)pyrene	50-32-8	6.0	J	3.6	8.9	5
10138	Benzo(b)fluoranthene	205-99-2	10		3.6	8.9	5
10138	Benzo(g,h,i)perylene	191-24-2	4.4	J	3.6	8.9	5
10138	Benzo(k)fluoranthene	207-08-9	3.6	U	3.6	8.9	5
10138	Chrysene	218-01-9	8.6	J	1.8	8.9	5
10138	Dibenz(a,h)anthracene	53-70-3	3.6	U	3.6	8.9	5
10138	Fluorene	86-73-7	3.6	U	3.6	8.9	5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.6	U	3.6	8.9	5
10138	1-Methylnaphthalene	90-12-0	3.6	U	3.6	8.9	5
10138	2-Methylnaphthalene	91-57-6	3.6	U	3.6	8.9	5
10138	Naphthalene	91-20-3	3.6	U	3.6	8.9	5
10138	N-Nitrosodimethylamine	62-75-9	3.6	U	3.6	8.9	5
10138	Phenanthrene	85-01-8	4.8	J	3.6	8.9	5
	Reporting limits were raised due to interference from the sample matrix.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.9	1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6	1
10401	2,4-DB	94-82-6	17	U	17	17	1
10401	Dicamba	1918-00-9	0.43	U	0.43	1.3	1
10401	Dinoseb	88-85-7	0.86	U	0.86	2.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.86	U	0.86	1.8	1
10401	MCPA	94-74-6	310		81	270	1
10401	MCPP (Mecoprop)	93-65-2	560	U	560	560	1
10401	2,4,5-T	93-76-5	0.088	U	0.088	0.18	1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
	Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167490
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL202 SDG#: DE042-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.071	U	0.071	0.18	1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18	1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18	1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18	1
01363	Chlordane	57-74-9	4.6	U	4.6	4.6	1
01363	p,p-DDD	72-54-8	0.68	U	0.68	0.68	1
01363	p,p-DDE	72-55-9	0.084	U	0.084	0.36	1
01363	p,p-DDT	50-29-3	0.64	U	0.64	0.64	1
01363	Delta BHC	319-86-8	0.039	U	0.039	0.18	1
01363	Dieldrin	60-57-1	0.35	U	0.35	0.36	1
01363	Endosulfan I	959-98-8	0.083	U	0.083	0.18	1
01363	Endosulfan II	33213-65-9	0.21	U	0.21	0.36	1
01363	Endosulfan Sulfate	1031-07-8	0.071	U	0.071	0.36	1
01363	Endrin	72-20-8	0.071	U	0.071	0.36	1
01363	Endrin Aldehyde	7421-93-4	0.071	U	0.071	0.36	1
01363	Endrin Ketone	53494-70-5	0.071	U	0.071	0.36	1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18	1
01363	Heptachlor Epoxide	1024-57-3	0.18	U	0.18	0.18	1
01363	Methoxychlor	72-43-5	0.43	U	0.43	1.8	1
01363	Mirex	2385-85-5	0.071	U	0.071	0.36	1
01363	Toxaphene	8001-35-2	2.4	U	2.4	7.1	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5	1
10225	Aroclor 5460	11126-42-4	2.2	J	1.1	3.5	1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8	1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.56	U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.8	1
10225	PCB-1248	12672-29-6	1.8	J	0.35	1.8	1
10225	PCB-1254	11097-69-1	2.4		0.35	1.8	1
10225	PCB-1260	11096-82-5	1.8	J	0.35	1.8	1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8	1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,500		5.34	21.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167490
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL202 SDG#: DE042-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
07914	Boron	7440-42-8	4.42	J	0.944	5.31	1
01650	Calcium	7440-70-2	3,400		6.51	21.2	1
01654	Iron	7439-89-6	22,900		5.00	21.2	1
01656	Lithium	7439-93-2	21.9		0.23	2.1	1
01657	Magnesium	7439-95-4	4,580		2.70	10.6	1
06958	Manganese	7439-96-5	350		0.0828	0.531	1
10145	Phosphorus	7723-14-0	445		0.594	10.6	1
01662	Potassium	7440-09-7	3,960		19.1	53.1	1
01667	Sodium	7440-23-5	93.3	J	39.6	106	1
07968	Strontium	7440-24-6	22.6		0.0658	0.531	1
06969	Tin	7440-31-5	2.61	J	1.06	10.6	1
06970	Titanium	7440-32-6	1,240		0.403	1.06	1
10146	Zirconium	7440-67-7	1.47	J	0.891	5.31	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.189	J	0.0618	0.206	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.14		0.0618	0.412	2
06126	Barium	7440-39-3	154		0.111	0.412	2
06127	Beryllium	7440-41-7	0.775		0.0165	0.103	2
06128	Cadmium	7440-43-9	0.334		0.0371	0.103	2
06131	Chromium	7440-47-3	28.3		0.124	0.412	2
06132	Cobalt	7440-48-4	7.91		0.0206	0.103	2
06133	Copper	7440-50-8	13.2		0.0680	0.412	2
06135	Lead	7439-92-1	17.3		0.0107	0.206	2
06138	Molybdenum	7439-98-7	1.05		0.0515	0.103	2
06139	Nickel	7440-02-0	18.1		0.103	0.412	2
06141	Selenium	7782-49-2	0.0909	J	0.0412	0.412	2
06142	Silver	7440-22-4	0.0856	J	0.0124	0.103	2
06145	Thallium	7440-28-0	0.405		0.0309	0.103	2
06148	Vanadium	7440-62-2	53.0		0.0227	0.103	2
06149	Zinc	7440-66-6	98.7		0.577	3.09	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0503	J	0.0029	0.102	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5		0.86	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	32.2	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.86	J	0.21	1.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167490
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL202 SDG#: DE042-20*

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	418	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.50	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	6.7	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10355SLB026	01/20/2011 18:32	Timothy J Trees	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10355SLE026	01/07/2011 12:06	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10355SLE026	12/22/2010 06:45	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10355SLB026	12/22/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620012A	01/02/2011 09:15	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610030A	01/25/2011 02:39	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560034A	12/31/2010 07:08	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610030A	12/28/2010 07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560034A	12/23/2010 06:30	Kerrie A Freeburn	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620012A	12/29/2010 00:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167490
LLI Group # 1225974
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/03/2011 16:12

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL202 SDG#: DE042-20*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103545708002	12/30/2010 18:19	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103541026002D	12/30/2010 16:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103541026002C	12/30/2010 16:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103541026002B	01/04/2011 13:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103541026002A	12/30/2010 16:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711001	12/23/2010 19:53	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103545708002	12/20/2010 13:11	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103541026002	12/20/2010 13:30	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103545711002	12/20/2010 16:08	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	103575711001	12/23/2010 11:49	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11007007205B	01/12/2011 14:31	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11011011201B	01/13/2011 08:05	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11013243202A	01/18/2011 22:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11007007205B	01/08/2011 10:00	Erik J Frederiksen	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	2	11011011201B	01/11/2011 19:40	Joseph E McKenzie	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10354182101B	12/20/2010 14:00	Michele L Graham	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10354039401B	12/20/2010 14:00	Michele L Graham	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11013243202A	01/13/2011 20:35	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225974
Reported: 02/03/11 at 04:12 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10355SLB026	Sample number(s): 6167468-6167483,6167485-6167490									
Acenaphthene	17	U	17.	170	ug/kg	90		76-111		
Acenaphthylene	17	U	17.	170	ug/kg	92		75-122		
Aniline	170 U		170.	500	ug/kg	73		10-107		
Anthracene	17	U	17.	170	ug/kg	96		76-112		
Benzidine	1,200 U		1,200.	3,300	ug/kg	62		15-121		
Benzo(a)anthracene	17	U	17.	170	ug/kg	92		73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	87		69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	85		61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	88		65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	88		67-125		
Benzoic acid	170 U		170.	500	ug/kg	87		10-154		
Benzyl alcohol	170 U		170.	500	ug/kg	94		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	87		79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	87		75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	98		79-112		
Carbazole	17	U	17.	170	ug/kg	101		77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	90		74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	83		10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	89		70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	83		70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	84		68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	75		67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	90		72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	96		79-110		
Chrysene	17	U	17.	170	ug/kg	97		76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	87		70-128		
Dibenzofuran	17	U	17.	170	ug/kg	89		79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	86		79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	86		70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	85		74-106		
3,3'-Dichlorobenzidine	100 U		100.	330	ug/kg	80		38-105		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	93		75-111		
Diethylphthalate	17	U	17.	170	ug/kg	91		76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	87		72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	100		70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	91		77-109		
4,6-Dinitro-2-methylphenol	170 U		170.	500	ug/kg	98		53-110		
2,4-Dinitrophenol	670 U		670.	2,000	ug/kg	95		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	93		73-115		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225974
Reported: 02/03/11 at 04:12 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	91		79-115		
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	92		77-111		
bis(2-Ethylhexyl)phthalate	17	U	17.	330	ug/kg	94		75-117		
Fluoranthene	17	U	17.	170	ug/kg	105		78-116		
Fluorene	17	U	17.	170	ug/kg	92		75-116		
Hexachlorobenzene	17	U	17.	170	ug/kg	98		78-116		
Hexachlorobutadiene	67	U	67.	170	ug/kg	86		70-112		
Hexachlorocyclopentadiene	170	U	170.	500	ug/kg	93		46-115		
Hexachloroethane	17	U	17.	170	ug/kg	81		68-105		
Indeno(1,2,3-cd)pyrene	17	U	17.	170	ug/kg	88		64-119		
Isophorone	17	U	17.	170	ug/kg	88		69-110		
1-Methylnaphthalene	17	U	17.	170	ug/kg	93		74-105		
2-Methylnaphthalene	17	U	17.	170	ug/kg	86		76-105		
2-Methylphenol	33	U	33.	170	ug/kg	90		66-110		
4-Methylphenol	33	U	33.	170	ug/kg	96		66-117		
Naphthalene	17	U	17.	170	ug/kg	90		73-106		
2-Nitroaniline	17	U	17.	170	ug/kg	99		78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	92		62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	86		49-98		
Nitrobenzene	17	U	17.	170	ug/kg	81		71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	94		81-114		
4-Nitrophenol	170	U	170.	500	ug/kg	59		56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	79		63-107		
N-Nitrosodimethylamine	33	U	33.	170	ug/kg	91		60-106		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	97		67-141		
Di-n-octylphthalate	17	U	17.	170	ug/kg	85		68-130		
Pentachlorophenol	170	U	170.	500	ug/kg	80		35-106		
Phenanthrene	17	U	17.	170	ug/kg	94		77-113		
Phenol	17	U	17.	170	ug/kg	89		58-112		
Pyrene	17	U	17.	170	ug/kg	87		75-115		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	89		73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	93		76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	87		78-111		
Batch number: 10355SLE026	Sample number(s): 6167468-6167483,6167485-6167490									
Acenaphthene	0.67	U	0.67	1.7	ug/kg	85		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	90		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	89		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	93		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	89		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	103		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	91		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	90		66-137		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	99		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	100		84-132		
Chrysene	0.33	U	0.33	1.7	ug/kg	90		79-120		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	91		62-142		
Diethylphthalate	6.0	U	6.0	18	ug/kg	83		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	95		70-130		
Bis(2-Ethylhexyl)phthalate	6.0	U	6.0	18	ug/kg	109		67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	92		78-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	95		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	92		62-141		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	88		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	78		62-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225974
Reported: 02/03/11 at 04:12 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Naphthalene	0.67	U	0.67	1.7	ug/kg	84		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	92		39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	94		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	88		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	95		56-121		
Batch number: 103620012A	Sample number(s): 6167468-6167483,6167485-6167490									
2,4-D	1.2	U	1.2	3.6	ug/kg	104		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	72		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	90		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	92		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	5*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	109		60-141		
MCPA	76	U	76.	250	ug/kg	111		34-113		
MCPP (Mecoprop)	75	U	75.	250	ug/kg	120		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	102		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	82		48-138		
Batch number: 110040016A	Sample number(s): 6167468,6167472									
6a Perchlorate EPA 6850	2.1	U	2.1	5.0	ug/kg	105		85-115		
Batch number: 103560034A	Sample number(s): 6167468-6167483,6167485-6167490									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	68*	61*	75-125	10	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	116		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	133		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 103610030A	Sample number(s): 6167468-6167483,6167485-6167490									
Aldrin	0.066	U	0.066	0.17	ug/kg	118		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	79		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	84		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	82		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	93		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	129		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	89		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	88		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	89		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	85		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	118		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	132		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	91		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	92		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	115		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	94		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	124		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	89		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225974
Reported: 02/03/11 at 04:12 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 103541026002A	Sample number(s): 6167468-6167490									
Antimony	0.0600	U	0.0600	0.200	mg/kg	93		11-208		
Arsenic	0.0600	U	0.0600	0.400	mg/kg	96		80-120		
Beryllium	0.0160	U	0.0160	0.100	mg/kg	96		82-118		
Cadmium	0.0360	U	0.0360	0.100	mg/kg	98		82-118		
Chromium	0.120	U	0.120	0.400	mg/kg	102		80-120		
Cobalt	0.0200	U	0.0200	0.100	mg/kg	95		82-118		
Copper	0.111	J	0.0660	0.400	mg/kg	95		80-120		
Lead	0.0104	U	0.0104	0.200	mg/kg	93		80-120		
Nickel	0.100	U	0.100	0.400	mg/kg	103		80-120		
Silver	0.0120	U	0.0120	0.100	mg/kg	95		66-134		
Thallium	0.0300	U	0.0300	0.100	mg/kg	97		81-119		
Vanadium	0.0220	U	0.0220	0.100	mg/kg	95		90-110		
Zinc	0.560	U	0.560	3.00	mg/kg	96		78-122		
Batch number: 103541026002B	Sample number(s): 6167468-6167490									
Selenium	0.0400	U	0.0400	0.400	mg/kg	90		79-122		
Batch number: 103541026002C	Sample number(s): 6167468-6167490									
Molybdenum	0.0500	U	0.0500	0.100	mg/kg	107		78-122		
Batch number: 103541026002D	Sample number(s): 6167468-6167490									
Barium	0.108	U	0.108	0.400	mg/kg	100		79-121		
Batch number: 103545708002	Sample number(s): 6167468-6167490									
Aluminum	4.84	U	4.84	19.2	mg/kg	90		61-110		
Boron	0.856	U	0.856	4.81	mg/kg	87		78-110		
Calcium	5.92	J	5.89	19.2	mg/kg	92		88-110		
Iron	4.53	U	4.53	19.2	mg/kg	89		61-110		
Lithium	0.21	U	0.21	1.9	mg/kg	101		80-120		
Magnesium	2.44	U	2.44	9.62	mg/kg	90		82-110		
Manganese	0.0750	U	0.0750	0.481	mg/kg	94		81-119		
Phosphorus	1.80	J	0.538	9.62	mg/kg	103		80-120		
Potassium	17.3	U	17.3	48.1	mg/kg	90		78-110		
Sodium	35.9	U	35.9	96.2	mg/kg	91		87-110		
Strontium	0.0596	U	0.0596	0.481	mg/kg	97		79-121		
Tin	1.23	J	0.962	9.62	mg/kg	93		90-114		
Titanium	0.365	U	0.365	0.962	mg/kg	94		80-120		
Zirconium	0.808	U	0.808	4.81	mg/kg	101		80-120		
Batch number: 103575711001	Sample number(s): 6167468-6167490									
Mercury	0.0027	U	0.0027	0.0933	mg/kg	95		88-123		
Batch number: 11007007205A	Sample number(s): 6167468-6167477									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	107		90-110		
Batch number: 11007007205B	Sample number(s): 6167478-6167482,6167484-6167490									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	107		90-110		
Batch number: 11011011201A	Sample number(s): 6167468-6167477									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	102		85-115		
Batch number: 11011011201B	Sample number(s): 6167478-6167482,6167484-6167490									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	102		85-115		
Batch number: 11013243202A	Sample number(s): 6167468-6167482,6167484-6167490									
3a Cr VI by EPA 7199	0.20	U	0.20	1.0	mg/kg	97		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225974
Reported: 02/03/11 at 04:12 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10354039401A	Sample number(s): 6167468-6167477								
22a pH by 9045C					100		95-105		
Batch number: 10354039401B	Sample number(s): 6167478-6167481,6167484-6167490								
22a pH by 9045C					100		95-105		
Batch number: 10354182101A	Sample number(s): 6167468-6167477								
Oxidation Reduction Potential					99		98-102		
Batch number: 10354182101B	Sample number(s): 6167478-6167481,6167484-6167490								
Oxidation Reduction Potential					99		98-102		
Batch number: 10357162402A	Sample number(s): 6167468-6167479								
28a Moisture Content by 160.3					100		80-120		
Batch number: 10357162402B	Sample number(s): 6167480-6167490								
28a Moisture Content by 160.3					100		80-120		
28a Moisture Content by 160.3					100		80-120		
28a Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10355SLB026	Sample number(s): 6167468-6167483,6167485-6167490 UNSPK: 6167481								
Acenaphthene	88	88	75-115	0	30				
Acenaphthylene	90	94	49-126	4	30				
Aniline	37	26	14-114	34*	30				
Anthracene	92	92	75-115	1	30				
Benzidine	0*	0*	35-141	0	30				
Benzo(a)anthracene	90	95	65-122	5	30				
Benzo(a)pyrene	82	87	57-126	6	30				
Benzo(b)fluoranthene	81	85	59-125	4	30				
Benzo(g,h,i)perylene	78	79	59-127	2	30				
Benzo(k)fluoranthene	79	84	56-132	6	30				
Benzoic acid	45	20	10-173	78*	30				
Benzyl alcohol	94	91	55-123	3	30				
4-Bromophenyl-phenylether	88	89	67-129	2	30				
Butylbenzylphthalate	82	86	73-134	5	30				
Di-n-butylphthalate	99	94	67-123	6	30				
Carbazole	97	98	64-120	0	30				
4-Chloro-3-methylphenol	85	86	53-130	2	30				
4-Chloroaniline	49	44	23-95	11	30				
bis(2-Chloroethoxy)methane	85	85	54-117	0	30				
bis(2-Chloroethyl)ether	87	86	60-116	1	30				
bis(2-Chloroisopropyl)ether	81	79	55-142	3	30				
2-Chloronaphthalene	70	72	50-141	2	30				
2-Chlorophenol	89	88	73-121	0	30				
4-Chlorophenyl-phenylether	91	96	64-119	5	30				
Chrysene	92	98	62-128	6	30				
Dibenz(a,h)anthracene	81	83	65-125	2	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225974
Reported: 02/03/11 at 04:12 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Dibenzofuran	88	92	71-112	5	30				
1,2-Dichlorobenzene	84	84	66-108	0	30				
1,3-Dichlorobenzene	85	82	63-109	4	30				
1,4-Dichlorobenzene	86	82	53-113	5	30				
3,3'-Dichlorobenzidine	52	47	25-123	11	30				
2,4-Dichlorophenol	89	91	78-117	1	30				
Diethylphthalate	85	91	66-118	7	30				
2,4-Dimethylphenol	82	75	56-130	9	30				
3,5-Dimethylphenol	96	93	70-130	3	30				
Dimethylphthalate	87	91	64-118	5	30				
4,6-Dinitro-2-methylphenol	90	79	10-148	12	30				
2,4-Dinitrophenol	58	51	20-143	14	30				
2,4-Dinitrotoluene	87	92	57-114	5	30				
2,6-Dinitrotoluene	88	92	69-123	5	30				
1,2-Diphenylhydrazine	90	87	71-129	4	30				
bis(2-Ethylhexyl)phthalate	94	96	63-122	2	30				
Fluoranthene	109	102	59-122	7	30				
Fluorene	87	92	60-125	5	30				
Hexachlorobenzene	97	94	61-111	3	30				
Hexachlorobutadiene	78	82	62-120	4	30				
Hexachlorocyclopentadiene	84	89	10-153	6	30				
Hexachloroethane	77	76	57-109	1	30				
Indeno(1,2,3-cd)pyrene	82	83	61-126	1	30				
Isophorone	84	83	51-118	1	30				
1-Methylnaphthalene	88	87	73-112	1	30				
2-Methylnaphthalene	80	83	76-114	3	30				
2-Methylphenol	90	86	47-142	5	30				
4-Methylphenol	95	89	55-126	7	30				
Naphthalene	84	86	72-116	2	30				
2-Nitroaniline	97	96	67-125	1	30				
3-Nitroaniline	77	79	59-122	3	30				
4-Nitroaniline	76	75	52-112	0	30				
Nitrobenzene	78	78	51-114	0	30				
2-Nitrophenol	86	89	74-115	4	30				
4-Nitrophenol	63	60	39-133	5	30				
N-Nitroso-di-n-propylamine	81	77	60-116	6	30				
N-Nitrosodimethylamine	93	94	47-116	1	30				
N-Nitrosodiphenylamine	92	87	86-145	5	30				
Di-n-octylphthalate	85	85	56-126	0	30				
Pentachlorophenol	82	76	17-149	8	30				
Phenanthrene	90	88	65-125	2	30				
Phenol	89	87	58-126	3	30				
Pyrene	79	83	51-151	4	30				
1,2,4-Trichlorobenzene	82	84	72-115	3	30				
2,4,5-Trichlorophenol	87	92	34-139	7	30				
2,4,6-Trichlorophenol	86	90	49-140	4	30				
Batch number: 10355SLE026	Sample number(s): 6167468-6167483,6167485-6167490 UNSPK: 6167481								
Acenaphthene	83	82	63-105	1	30				
Acenaphthylene	88	88	55-126	0	30				
Anthracene	92	88	46-136	4	30				
Benzo(a)anthracene	93	91	39-144	2	30				
Benzo(a)pyrene	86	85	34-156	1	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225974
Reported: 02/03/11 at 04:12 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(b)fluoranthene	114	119	43-155	5	30				
Benzo(g,h,i)perylene	46	48	33-141	4	30				
Benzo(k)fluoranthene	90	88	42-144	2	30				
Butylbenzylphthalate	104	97	73-140	8	30				
Di-n-butylphthalate	104	103	78-160	1	30				
Chrysene	95	87	29-156	8	30				
Dibenz(a,h)anthracene	53	59	41-130	10	30				
Diethylphthalate	81*	81*	87-131	0	30				
Dimethylphthalate	93	91	74-118	3	30				
Bis(2-Ethylhexyl)phthalate	169*	115	39-167	37*	30				
Fluoranthene	108	94	26-166	13	30				
Fluorene	91	90	45-121	1	30				
Indeno(1,2,3-cd)pyrene	52	56	21-143	8	30				
1-Methylnaphthalene	91	87	72-123	5	30				
2-Methylnaphthalene	82	78	28-121	4	30				
Naphthalene	88	83	61-102	6	30				
N-Nitrosodimethylamine	97	94	48-113	3	30				
Di-n-octylphthalate	128	111	40-192	15	30				
Phenanthrene	98	87	12-165	12	30				
Pyrene	96	87	15-153	10	30				
Batch number: 103620012A	Sample number(s): 6167468-6167483,6167485-6167490 UNSPK: 6167481								
2,4-D	93	69	28-161	30	35				
Dalapon	0*	24	12-86	200*	50				
2,4-DB	108	273*	20-170	87*	50				
Dicamba	65	148*	33-120	52*	50				
Dinoseb	6	16	1-44	85*	35				
2,4-DP (Dichlorprop)	115	116	55-141	1	50				
MCPA	149	160	31-184	7	50				
MCPP (Mecoprop)	0*	111	16-174	200*	50				
2,4,5-T	83	108	25-132	26	35				
2,4,5-TP	117	105	10-183	11	35				
Batch number: 110040016A	Sample number(s): 6167468,6167472 UNSPK: 6167468								
6a Perchlorate EPA 6850	110	110	80-120	0	20				
Batch number: 103560034A	Sample number(s): 6167468-6167483,6167485-6167490 UNSPK: 6167481								
PCB-1016	132	112	29-146	16	50				
PCB-1260	141	131	39-149	8	50				
Batch number: 103610030A	Sample number(s): 6167468-6167483,6167485-6167490 UNSPK: 6167481								
Aldrin	97	94	16-126	3	50				
Alpha BHC	109	64	10-129	53*	50				
Beta BHC	81	75	14-147	8	50				
Gamma BHC - Lindane	112	73	10-140	43	50				
p,p-DDD	97	100	16-163	3	50				
p,p-DDE	135	166*	18-161	20	50				
p,p-DDT	117	129	10-176	10	50				
Delta BHC	75	72	23-140	4	50				
Dieldrin	77	80	19-154	4	50				
Endosulfan I	67	73	16-137	9	50				
Endosulfan II	108	111	28-154	3	50				
Endosulfan Sulfate	117	111	21-160	5	50				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225974
Reported: 02/03/11 at 04:12 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Endrin	80	80	11-149	0	50				
Endrin Aldehyde	58	59	10-148	3	35				
Endrin Ketone	94	77	22-165	19	50				
Heptachlor	73	73	13-126	0	50				
Heptachlor Epoxide	103	109	13-157	6	50				
Methoxychlor	63	63	32-147	0	50				
Batch number: 103541026002A	Sample number(s): 6167468-6167490 UNSPK: 6167481 BKG: 6167481								
Antimony	62*	56*	75-125	8	20	0.197 J	0.217	10 (1)	20
Arsenic	299*	300*	75-125	0	20	5.09	7.29	36*	20
Beryllium	188*	198*	75-125	3	20	0.589	0.770	27*	20
Cadmium	181*	179*	75-125	2	20	0.214	0.303	34* (1)	20
Chromium	213*	238*	75-125	5	20	19.0	25.4	29*	20
Cobalt	137*	142*	75-125	2	20	6.09	7.47	20	20
Copper	156*	167*	75-125	3	20	10.1	12.4	21*	20
Lead	290 (2)	369 (2)	75-125	10	20	12.8	16.9	27*	20
Nickel	183*	192*	75-125	2	20	12.8	16.5	25*	20
Silver	163*	167*	75-125	2	20	0.0934 J	0.100	7 (1)	20
Thallium	184*	185*	75-125	0	20	0.333	0.389	16 (1)	20
Vanadium	289*	314*	75-125	3	20	35.4	45.2	24*	20
Zinc	354 (2)	384 (2)	75-125	3	20	53.4	72.4	30*	20
Batch number: 103541026002B	Sample number(s): 6167468-6167490 UNSPK: 6167481 BKG: 6167481								
Selenium	91	91	75-125	0	20	0.133 J	0.116 J	14 (1)	20
Batch number: 103541026002C	Sample number(s): 6167468-6167490 UNSPK: 6167481 BKG: 6167481								
Molybdenum	169*	177*	75-125	3	20	0.781	0.911	15	20
Batch number: 103541026002D	Sample number(s): 6167468-6167490 UNSPK: 6167481 BKG: 6167481								
Barium	599 (2)	627 (2)	75-125	1	20	110	141	24*	20
Batch number: 103545708002	Sample number(s): 6167468-6167490 UNSPK: 6167481 BKG: 6167481								
Aluminum	1508 (2)	1850 (2)	75-125	4	20	13,300	13,000	2	20
Boron	93	91	84-115	0	20	3.82 J	3.78 J	1 (1)	20
Calcium	86 (2)	136 (2)	75-125	6	20	2,900	2,480	16	20
Iron	-871 (2)	1520 (2)	75-125	13	20	17,400	15,700	11	20
Lithium	100	98	82-114	0	20	15.4	14.8	4	20
Magnesium	156 (2)	302 (2)	75-125	8	20	3,130	3,050	2	20
Manganese	62 (2)	174 (2)	75-125	15	20	316	325	3	20
Phosphorus	64*	92	75-125	10	20	226	192	16	20
Potassium	123	144*	75-125	6	20	2,670	2,590	3	20
Sodium	98	95	75-125	1	20	84.7 J	81.4 J	4 (1)	20
Strontium	98	98	75-115	1	20	21.3	20.1	6	20
Tin	90	89	80-110	0	20	2.15 J	2.12 J	1 (1)	20
Titanium	288 (2)	359 (2)	75-125	5	20	1,090	1,060	3	20
Zirconium	93	93	75-125	1	20	2.01 J	2.39 J	17 (1)	20
Batch number: 103575711001	Sample number(s): 6167468-6167490 UNSPK: 6167481 BKG: 6167481								
Mercury	111	101	65-135	12	20	0.0028 U	0.0027 U	0 (1)	20
Batch number: 11007007205A	Sample number(s): 6167468-6167477 UNSPK: 6167477 BKG: 6167477								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225974
Reported: 02/03/11 at 04:12 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
11a Anions by 300.0 - Fluoride	82		80-120			1.5	1.0	38* (1)	20
Batch number: 11007007205B	Sample number(s): 6167478-6167482,6167484-6167490 UNSPK: 6167481 BKG: 6167481								
11a Anions by 300.0 - Fluoride	77*		80-120			2.5	2.3	4 (1)	20
Batch number: 11011011201A	Sample number(s): 6167468-6167477 UNSPK: 6167468 BKG: 6167468								
7a Perchlorate EPA 314.0	104		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11011011201B	Sample number(s): 6167478-6167482,6167484-6167490 UNSPK: 6167481 BKG: 6167481								
7a Perchlorate EPA 314.0	99		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11013243202A	Sample number(s): 6167468-6167482,6167484-6167490 UNSPK: 6167481 BKG: 6167481								
3a Cr VI by EPA 7199	80		75-125			0.54 J	0.53 J	2 (1)	20
Batch number: 10354039401A	Sample number(s): 6167468-6167477 BKG: 6167468								
22a pH by 9045C						7.19	7.24	1	1
Batch number: 10354039401B	Sample number(s): 6167478-6167481,6167484-6167490 BKG: 6167481								
22a pH by 9045C						7.23	7.14	1	1
Batch number: 10354182101A	Sample number(s): 6167468-6167477 BKG: 6167468								
Oxidation Reduction Potential						437	427	2	6
Batch number: 10354182101B	Sample number(s): 6167478-6167481,6167484-6167490 BKG: 6167481								
Oxidation Reduction Potential						448	463	3	6
Batch number: 10357162402A	Sample number(s): 6167468-6167479 BKG: 6167471								
28a Moisture Content by 160.3						25.8	24.4	6	20
Batch number: 10357162402B	Sample number(s): 6167480-6167490 BKG: 6167481								
28a Moisture Content by 160.3						6.9	6.8	2	20
28a Moisture Content by 160.3						6.9	6.8	2	20
28a Moisture Content by 160.3						6.9	6.8	2	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 10355SLB026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6167468	89	88	89	77	88	66
6167469	89	90	94	78	88	67
6167470	87	87	88	70	82	73
6167471	89	84	99	78	89	67
6167472	81	80	90	73	85	70
6167473	86	82	88	75	83	66
6167474	88	83	86	74	85	70

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225974
Reported: 02/03/11 at 04:12 PM

Surrogate Quality Control

6167475	77	77	77	69	79	68
6167476	89	84	87	75	88	80
6167477	89	82	89	78	87	77
6167478	85	76	92	74	84	71
6167479	84	83	86	78	89	66
6167480	86	83	85	76	89	83
6167481	88	89	92	80	83	76
6167482	89	91	92	75	88	72
6167483	91	89	94	77	85	73
6167485	85	79	86	79	89	79
6167486	86	82	83	75	87	80
6167487	84	81	85	75	90	80
6167488	88	90	80	80	88	84
6167489	90	90	87	80	88	82
6167490	87	92	82	81	87	82
Blank	90	94	102	82	85	78
LCS	90	91	98	79	87	74
MS	89	91	92	75	88	72
MSD	91	89	94	77	85	73
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10355SLE026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6167468	90	78	76
6167469	92	83	84
6167470	91	81	86
6167471	91	80	80
6167472	94	85	87
6167473	96	85	84
6167474	96	84	85
6167475	90	83	84
6167476	98	83	85
6167477	92	84	86
6167478	91	83	83
6167479	98	85	86
6167480	91	80	93
6167481	93	85	87
6167482	90	80	81
6167483	85	78	83
6167485	89	79	83
6167486	93	83	85
6167487	96	85	92
6167488	83	72	67
6167489	115	75	88
6167490	86	76	75
Blank	86	80	88
LCS	91	83	90
MS	90	80	81
MSD	85	78	83
Limits:	40-130	45-130	45-135

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 103560034A

	Tetrachloro-m-xylene	Decachlorobiphenyl

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225974
Reported: 02/03/11 at 04:12 PM

Surrogate Quality Control

6167468	91	105
6167469	82	89
6167470	95	95
6167471	75	78
6167472	107	97
6167473	78	89
6167474	104	101
6167475	85	84
6167476	110	108
6167477	100	262*
6167478	89	145*
6167479	96	110
6167480	110	58
6167481	108	118
6167482	121	125*
6167483	100	114
6167485	137	91
6167486	94	87
6167487	118	105
6167488	111	96
6167489	151*	124*
6167490	83	60
Blank	140*	99
LCS	120	100
LCSD	92	95
MS	121	125*
MSD	100	114
Limits:	53-139	45-120

Analysis Name: 12a Pesticides by 8081A
Batch number: 103610030A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6167468	67	188*
6167469	51	241*
6167470	48*	83
6167471	75	190*
6167472	76	176*
6167473	75	79
6167474	68	78
6167475	55	52
6167476	52	68
6167477	56	0*
6167478	88	216*
6167479	90	87
6167480	101	0*
6167481	69	77
6167482	63	50
6167483	68	80
6167485	62	0*
6167486	76	0*
6167487	54	0*
6167488	68	81
6167489	52	29
6167490	63	289*
Blank	76	103

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225974
Reported: 02/03/11 at 04:12 PM

Surrogate Quality Control

LCS	84	111
MS	63	50
MSD	68	80
Limits:	50-130	20-120

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 103620012A

	2,4-Dichlorophenylacetic acid
6167468	107
6167469	93
6167470	130
6167471	82
6167472	92
6167473	76
6167474	79
6167475	83
6167476	115
6167477	97
6167478	42
6167479	64
6167480	103
6167481	88
6167482	106
6167483	79
6167485	122
6167486	87
6167487	125
6167488	70
6167489	105
6167490	107
Blank	100
LCS	104
MS	106
MSD	79
Limits:	36-156

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

13013 1225974 61674468-90

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-DRO EPA 8015B Mod.	*Metals EPA 6010/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
DUP07-SA5B-QC-121610	12.16.10	1129	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									DUP
EB04-SA5B-121610	12.16.10	1215	water	none	6-1 liter ambers			X						X	X			X	X										rinsate
EB04-SA5B-121610	12.16.10	1215	water	none	1-500 ml poly							X	X			X									X				rinsate
EB04-SA5B-121610	12.16.10	1215	water	HNO3	1-500 ml poly						X																		rinsate
EB16-SA5B-121610	12.16.10	1120	water	none	4-40 mL clear VOA vials															X							X		rinsate
EB16-SA5B-121610	12.16.10	1120	water	HCl	3-40 mL clear VOA vials				X																				rinsate
EB16-SA5B-121610	12.16.10	1120	water	none	1-250 mL glass																X								rinsate
EB16-SA5B-121610	12.16.10	1120	water	none	4-1 liter ambers					X												X	X			X			rinsate
EB16-SA5B-121610	12.16.10	1120	water	none	1-250 mL amber																				X				rinsate
EB16-SA5B-121610	12.16.10	1120	water	NaOH	1-500 ml poly																			X					rinsate
SED-011-SIV-SD-0.0-0.5	12.16.10	1418	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-013-SIV-SD-0.0-0.5	12.16.10	1526	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-017-SIV-SD-0.0-0.5	12.16.10	1045	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-019-SIV-SD-0.0-0.5	12.16.10	0930	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-020-SIV-SD-0.0-0.5	12.16.10	1140	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-040-SA5B-SB-1.5-2.5	12.16.10	1007	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-040-SA5B-SB-2.0	12.16.10	1004	soil	none	5 Encore Samplers	X	X		X																				
SL-040-SA5B-SB-9.0-10.0	12.16.10	1015	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-040-SA5B-SB-9.5	12.16.10	1011	soil	none	5 Encore Samplers	X	X		X																				
SL-041-SA5B-SB-1.5-2.5	12.16.10	1144	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-041-SA5B-SB-2.0	12.16.10	1140	soil	none	5 Encore Samplers	X	X		X																				
SL-041-SA5B-SB-8.5	12.16.10	1148	soil	none	5 Encore Samplers	X	X		X																				
SL-041-SA5B-SB-8.0-9.0	12.16.10	1155	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-042-SA5B-SB-2.5-3.5	12.16.10	1410	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-042-SA5B-SB-3.0	12.16.10	1404	soil	none	5 Encore Samplers	X	X		X																				
SL-042-SA5B-SB-8.0-9.0	12.16.10	1418	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-042-SA5B-SB-8.5	12.16.10	1413	soil	none	5 Encore Samplers	X	X		X																				
SL-043-SA5B-SB-2.5-3.5	12.16.10	1549	soil	none	3 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-043-SA5B-SB-3.0	12.16.10	1545	soil	none	5 Encore Samplers	X	X		X																				
SL-147-SA5B-SS-0.0-0.5	12.16.10	0855	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-169-SA5B-SS-0.0-0.5	12.16.10	1337	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-172-SA5B-SS-0.0-0.5	12.16.10	1352	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-173-SA5B-SS-0.0-0.5	12.16.10	1312	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-176-SA5B-SS-0.0-0.5	12.16.10	0925	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-178-SA5B-SS-0.0-0.5	12.16.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-186-SA5B-SS-0.0-0.5	12.16.10	1056	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-187-SA5B-SS-0.0-0.5	12.16.10	1119	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-189-SA5B-SS-0.0-0.5MS	12.16.10	1125	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X										MS/MSD
SL-192-SA5B-SS-0.0-0.5	12.16.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-194-SA5B-SS-0.0-0.5	12.16.10	1340	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-196-SA5B-SS-0.0-0.5	12.16.10	1312	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-198-SA5B-SS-0.0-0.5	12.16.10	1059	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-199-SA5B-SS-0.0-0.5	12.16.10	1323	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-202-SA5B-SS-0.0-0.5	12.16.10	1423	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-205-SA5B-SS-0.0-0.5	12.16.10	1432	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-284-SA5B-SS-0.0-0.5	12.16.10	1413	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-285-SA5B-SS-0.0-0.5	12.16.10	0920	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-286-SA5B-SS-0.0-0.5	12.16.10	0902	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-304-SA5B-SS-0.0-0.5	12.16.10	1510	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-305-SA5B-SS-0.0-0.5	12.16.10	1450	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
TB-121610	12.16.10	0800	water	HCl	4-40 mL clear VOA vials	X	X		X																				trip blank

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Laboratory:
	12.16.10 1700		12/17/10 940	Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time	Airbill No. 00732992		No. of coolers = 6

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 21, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/17/2010
Group Number: 1225976
SDG: DX026
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SED-011-SIV-SD-0.0-0.5 Sediment	6167492
SED-013-SIV-SD-0.0-0.5 Sediment	6167493
SED-017-SIV-SD-0.0-0.5 Sediment	6167494
SED-019-SIV-SD-0.0-0.5 Sediment	6167495
SED-020-SIV-SD-0.0-0.5 Sediment	6167496
SL-147-SA5B-SS-0.0-0.5 Soil	6167497
SL-169-SA5B-SS-0.0-0.5 Soil	6167498
SL-172-SA5B-SS-0.0-0.5 Soil	6167499
SL-173-SA5B-SS-0.0-0.5 Soil	6167500
SL-176-SA5B-SS-0.0-0.5 Soil	6167501
SL-178-SA5B-SS-0.0-0.5 Soil	6167502
SL-186-SA5B-SS-0.0-0.5 Soil	6167503
SL-187-SA5B-SS-0.0-0.5 Soil	6167504
SL-189-SA5B-SS-0.0-0.5 Soil	6167505
SL-189-SA5B-SS-0.0-0.5MS Soil	6167506
SL-189-SA5B-SS-0.0-0.5MSD Soil	6167507
SL-192-SA5B-SS-0.0-0.5 Soil	6167508
SL-194-SA5B-SS-0.0-0.5 Soil	6167509
SL-196-SA5B-SS-0.0-0.5 Soil	6167510
SL-198-SA5B-SS-0.0-0.5 Soil	6167511
SL-199-SA5B-SS-0.0-0.5 Soil	6167512
SL-202-SA5B-SS-0.0-0.5 Soil	6167513

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ELECTRONIC COPY TO CDM Federal Services Program Attn: Todd Burgesser

1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

Charles J. Neslund
Manager

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-011-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167492
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD011 SDG#: DX026-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	9.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-011-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167492
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD011 SDG#: DX026-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.120	J	0.0259	1.10	1
11031	12378-PeCDD	40321-76-4	0.432	JB	0.0523	5.51	1
11031	123478-HxCDD	39227-28-6	0.511	JB	0.0213	5.51	1
11031	123678-HxCDD	57653-85-7	1.40	JB	0.0225	5.51	1
11031	123789-HxCDD	19408-74-3	1.06	JB	0.0219	5.51	1
11031	1234678-HpCDD	35822-46-9	32.2	B	0.0462	5.51	1
11031	OCDD	3268-87-9	314	B	0.0649	11.0	1
11031	2378-TCDF	51207-31-9	0.219	JB	0.0351	1.10	1
11031	12378-PeCDF	57117-41-6	0.307	JB	0.0160	5.51	1
11031	23478-PeCDF	57117-31-4	0.515	JB	0.0161	5.51	1
11031	123478-HxCDF	70648-26-9	0.391	JB	0.0192	5.51	1
11031	123678-HxCDF	57117-44-9	0.342	JB	0.0173	5.51	1
11031	123789-HxCDF	72918-21-9	0.132	JB	0.0209	5.51	1
11031	234678-HxCDF	60851-34-5	0.436	JB	0.0191	5.51	1
11031	1234678-HpCDF	67562-39-4	5.49	JB	0.0166	5.51	1
11031	1234789-HpCDF	55673-89-7	0.462	JB	0.0233	5.51	1
11031	OCDF	39001-02-0	10.8	JB	0.0277	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	82	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	55	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	83	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	48	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-011-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167492
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD011 SDG#: DX026-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-011-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-011-SIV-SD-0.0-0.5

LLI Sample # SW 6167492
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:18 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD011 SDG#: DX026-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 04:40	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-013-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167493
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD013 SDG#: DX026-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	13.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-013-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167493
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD013 SDG#: DX026-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0815	JQ	0.0213	1.15	1
11031	12378-PeCDD	40321-76-4	0.847	JBQ	0.0495	5.75	1
11031	123478-HxCDD	39227-28-6	1.48	JB	0.0316	5.75	1
11031	123678-HxCDD	57653-85-7	3.74	JB	0.0328	5.75	1
11031	123789-HxCDD	19408-74-3	3.00	JB	0.0314	5.75	1
11031	1234678-HpCDD	35822-46-9	93.0	B	0.0838	5.75	1
11031	OCDD	3268-87-9	869	B	0.0698	11.5	1
11031	2378-TCDF	51207-31-9	0.355	JB	0.0380	1.15	1
11031	12378-PeCDF	57117-41-6	0.551	JB	0.0180	5.75	1
11031	23478-PeCDF	57117-31-4	0.680	JB	0.0182	5.75	1
11031	123478-HxCDF	70648-26-9	0.855	JB	0.0260	5.75	1
11031	123678-HxCDF	57117-44-9	0.743	JB	0.0234	5.75	1
11031	123789-HxCDF	72918-21-9	0.259	JB	0.0272	5.75	1
11031	234678-HxCDF	60851-34-5	0.972	JB	0.0254	5.75	1
11031	1234678-HpCDF	67562-39-4	14.3	B	0.0260	5.75	1
11031	1234789-HpCDF	55673-89-7	1.11	JB	0.0385	5.75	1
11031	OCDF	39001-02-0	28.3	B	0.0289	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	57	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	50	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-013-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167493
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD013 SDG#: DX026-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-013-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-013-SIV-SD-0.0-0.5

LLI Sample # SW 6167493
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 15:26 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD013 SDG#: DX026-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 05:36	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-017-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167494
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD017 SDG#: DX026-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-017-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167494
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD017 SDG#: DX026-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.190	J	0.0263	1.13	1
11031	12378-PeCDD	40321-76-4	0.963	JB	0.0547	5.65	1
11031	123478-HxCDD	39227-28-6	4.07	JB	0.0350	5.65	1
11031	123678-HxCDD	57653-85-7	15.1	B	0.0363	5.65	1
11031	123789-HxCDD	19408-74-3	5.15	JB	0.0353	5.65	1
11031	1234678-HpCDD	35822-46-9	419	B	0.139	5.65	1
11031	OCDD	3268-87-9	3,550	B	0.119	11.3	1
11031	2378-TCDF	51207-31-9	0.501	JB	0.0533	1.13	1
11031	12378-PeCDF	57117-41-6	0.661	JB	0.0247	5.65	1
11031	23478-PeCDF	57117-31-4	1.11	JB	0.0245	5.65	1
11031	123478-HxCDF	70648-26-9	1.31	JB	0.0347	5.65	1
11031	123678-HxCDF	57117-44-9	1.35	JB	0.0314	5.65	1
11031	123789-HxCDF	72918-21-9	0.332	JB	0.0388	5.65	1
11031	234678-HxCDF	60851-34-5	2.20	JB	0.0345	5.65	1
11031	1234678-HpCDF	67562-39-4	38.5	B	0.0438	5.65	1
11031	1234789-HpCDF	55673-89-7	3.16	JB	0.0563	5.65	1
11031	OCDF	39001-02-0	82.4	B	0.0356	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-017-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167494
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD017 SDG#: DX026-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-017-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-017-SIV-SD-0.0-0.5

LLI Sample # SW 6167494
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:45 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD017 SDG#: DX026-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 06:33	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-019-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167495
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD019 SDG#: DX026-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	25.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-019-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167495
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD019 SDG#: DX026-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	2.18 Q	0.107	1.35	1
11031	12378-PeCDD	40321-76-4	4.86 JBQ	0.240	6.74	1
11031	123478-HxCDD	39227-28-6	16.0 B	0.173	6.74	1
11031	123678-HxCDD	57653-85-7	62.8 B	0.173	6.74	1
11031	123789-HxCDD	19408-74-3	26.7 B	0.177	6.74	1
11031	1234678-HpCDD	35822-46-9	1,720 B	0.713	6.74	1
11031	OCDD	3268-87-9	24,600 EB	0.396	13.5	1
11031	2378-TCDF	51207-31-9	8.60 B	0.220	1.35	1
11650	2378-TCDF-Conf	51207-31-9	9.59 B	0.123	1.35	1
11031	12378-PeCDF	57117-41-6	18.1 B	0.0740	6.74	1
11031	23478-PeCDF	57117-31-4	9.60 B	0.0708	6.74	1
11031	123478-HxCDF	70648-26-9	11.8 B	0.150	6.74	1
11031	123678-HxCDF	57117-44-9	11.4 B	0.138	6.74	1
11031	123789-HxCDF	72918-21-9	2.48 JB	0.153	6.74	1
11031	234678-HxCDF	60851-34-5	13.7 B	0.138	6.74	1
11031	1234678-HpCDF	67562-39-4	239 B	0.165	6.74	1
11031	1234789-HpCDF	55673-89-7	21.9 B	0.196	6.74	1
11031	OCDF	39001-02-0	703 B	0.148	13.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-2378-TCDF-Conf	79	24 - 169
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	75	24 - 185
13C12-23478-PeCDF	74	21 - 178

*=This limit was used in the evaluation of the final result

Sample Description: SED-019-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167495
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD019 SDG#: DX026-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds		**%Rec**	**Windows**			
13C12-123478-HxCDF		80	26 - 152			
13C12-123678-HxCDF		82	26 - 123			
13C12-234678-HxCDF		83	28 - 136			
13C12-123789-HxCDF		82	29 - 147			
13C12-1234678-HpCDF		79	28 - 143			
13C12-1234789-HpCDF		80	26 - 138			
13C12-OCDF		79	17 - 157			
13C12-1278-TCDD (CRS)		79	35 - 197			

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-019-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-019-SIV-SD-0.0-0.5

LLI Sample # SW 6167495
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:30 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD019 SDG#: DX026-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 18:28	Nelson H Risser	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	11008001	02/04/2011 16:12	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-020-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167496
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD020 SDG#: DX026-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-020-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167496
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD020 SDG#: DX026-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.284	JQ	0.0353	1.09	1
11031	12378-PeCDD	40321-76-4	1.07	JB	0.0914	5.43	1
11031	123478-HxCDD	39227-28-6	2.51	JB	0.0601	5.43	1
11031	123678-HxCDD	57653-85-7	10.9	B	0.0630	5.43	1
11031	123789-HxCDD	19408-74-3	5.57	B	0.0609	5.43	1
11031	1234678-HpCDD	35822-46-9	293	B	0.214	5.43	1
11031	OCDD	3268-87-9	2,980	B	0.143	10.9	1
11031	2378-TCDF	51207-31-9	0.492	JBQ	0.0529	1.09	1
11031	12378-PeCDF	57117-41-6	0.971	JB	0.0286	5.43	1
11031	23478-PeCDF	57117-31-4	0.802	JB	0.0286	5.43	1
11031	123478-HxCDF	70648-26-9	1.31	JB	0.0466	5.43	1
11031	123678-HxCDF	57117-44-9	1.40	JB	0.0440	5.43	1
11031	123789-HxCDF	72918-21-9	0.322	JB	0.0536	5.43	1
11031	234678-HxCDF	60851-34-5	2.26	JB	0.0448	5.43	1
11031	1234678-HpCDF	67562-39-4	36.6	B	0.158	5.43	1
11031	1234789-HpCDF	55673-89-7	4.32	JBQ	0.210	5.43	1
11031	OCDF	39001-02-0	87.8	B	0.0850	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	90	26 - 152
13C12-123678-HxCDF	92	26 - 123
13C12-234678-HxCDF	89	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	83	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-020-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167496
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD020 SDG#: DX026-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-020-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-020-SIV-SD-0.0-0.5

LLI Sample # SW 6167496
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD020 SDG#: DX026-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 19:25	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167497
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL147 SDG#: DX026-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167497
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL147 SDG#: DX026-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.141	JQ	0.0318	1.14	1
11031	12378-PeCDD	40321-76-4	1.19	JB	0.0800	5.72	1
11031	123478-HxCDD	39227-28-6	2.06	JBQ	0.0596	5.72	1
11031	123678-HxCDD	57653-85-7	5.50	JB	0.0612	5.72	1
11031	123789-HxCDD	19408-74-3	3.99	JB	0.0611	5.72	1
11031	1234678-HpCDD	35822-46-9	153	B	0.131	5.72	1
11031	OCDD	3268-87-9	1,760	B	0.131	11.4	1
11031	2378-TCDF	51207-31-9	0.535	JB	0.0629	1.14	1
11031	12378-PeCDF	57117-41-6	2.05	JB	0.0294	5.72	1
11031	23478-PeCDF	57117-31-4	1.02	JB	0.0284	5.72	1
11031	123478-HxCDF	70648-26-9	1.30	JBQ	0.0441	5.72	1
11031	123678-HxCDF	57117-44-9	1.39	JB	0.0423	5.72	1
11031	123789-HxCDF	72918-21-9	0.445	JB	0.0497	5.72	1
11031	234678-HxCDF	60851-34-5	1.61	JB	0.0428	5.72	1
11031	1234678-HpCDF	67562-39-4	26.4	B	0.133	5.72	1
11031	1234789-HpCDF	55673-89-7	2.38	JB	0.148	5.72	1
11031	OCDF	39001-02-0	89.6	B	0.0686	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	91	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	90	28 - 136
13C12-123789-HxCDF	91	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	88	26 - 138
13C12-OCDF	76	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-147-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167497
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL147 SDG#: DX026-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-147-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-147-SA5B-SS-0.0-0.5

LLI Sample # SW 6167497
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 08:55 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL147 SDG#: DX026-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 20:21	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167498
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL169 SDG#: DX026-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167498
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL169 SDG#: DX026-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0922	JQ	0.0341	1.13	1
11031	12378-PeCDD	40321-76-4	1.26	JB	0.0738	5.67	1
11031	123478-HxCDD	39227-28-6	2.30	JB	0.0604	5.67	1
11031	123678-HxCDD	57653-85-7	6.65	B	0.0639	5.67	1
11031	123789-HxCDD	19408-74-3	4.72	JB	0.0608	5.67	1
11031	1234678-HpCDD	35822-46-9	178	B	0.172	5.67	1
11031	OCDD	3268-87-9	2,180	B	0.148	11.3	1
11031	2378-TCDF	51207-31-9	0.425	JB	0.0634	1.13	1
11031	12378-PeCDF	57117-41-6	1.09	JB	0.0310	5.67	1
11031	23478-PeCDF	57117-31-4	1.00	JB	0.0297	5.67	1
11031	123478-HxCDF	70648-26-9	1.27	JB	0.0475	5.67	1
11031	123678-HxCDF	57117-44-9	1.31	JB	0.0452	5.67	1
11031	123789-HxCDF	72918-21-9	0.642	JBQ	0.0514	5.67	1
11031	234678-HxCDF	60851-34-5	1.49	JB	0.0475	5.67	1
11031	1234678-HpCDF	67562-39-4	24.8	B	0.134	5.67	1
11031	1234789-HpCDF	55673-89-7	2.36	JB	0.169	5.67	1
11031	OCDF	39001-02-0	108	B	0.0830	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	80	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	89	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	89	28 - 136
13C12-123789-HxCDF	89	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	85	26 - 138
13C12-OCDF	78	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-169-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167498
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL169 SDG#: DX026-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-169-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-169-SA5B-SS-0.0-0.5

LLI Sample # SW 6167498
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:37 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL169 SDG#: DX026-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 21:18	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167499
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL172 SDG#: DX026-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167499
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL172 SDG#: DX026-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.142	JQ	0.0287	1.06	1
11031	12378-PeCDD	40321-76-4	0.883	JB	0.0667	5.30	1
11031	123478-HxCDD	39227-28-6	1.51	JB	0.0430	5.30	1
11031	123678-HxCDD	57653-85-7	3.39	JB	0.0449	5.30	1
11031	123789-HxCDD	19408-74-3	3.75	JB	0.0447	5.30	1
11031	1234678-HpCDD	35822-46-9	83.4	B	0.125	5.30	1
11031	OCDD	3268-87-9	1,390	B	0.101	10.6	1
11031	2378-TCDF	51207-31-9	0.225	JBQ	0.0484	1.06	1
11031	12378-PeCDF	57117-41-6	0.455	JB	0.0238	5.30	1
11031	23478-PeCDF	57117-31-4	0.466	JB	0.0229	5.30	1
11031	123478-HxCDF	70648-26-9	0.536	JB	0.0403	5.30	1
11031	123678-HxCDF	57117-44-9	0.670	JB	0.0375	5.30	1
11031	123789-HxCDF	72918-21-9	0.474	JB	0.0454	5.30	1
11031	234678-HxCDF	60851-34-5	0.775	JB	0.0373	5.30	1
11031	1234678-HpCDF	67562-39-4	11.0	B	0.0931	5.30	1
11031	1234789-HpCDF	55673-89-7	1.02	JB	0.119	5.30	1
11031	OCDF	39001-02-0	33.2	B	0.0642	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	90	25 - 181
13C12-123478-HxCDD	94	32 - 141
13C12-123678-HxCDD	93	28 - 130
13C12-123789-HxCDD	92	28 - 130
13C12-1234678-HpCDD	92	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	86	24 - 169
13C12-12378-PeCDF	95	24 - 185
13C12-23478-PeCDF	94	21 - 178
13C12-123478-HxCDF	103	26 - 152
13C12-123678-HxCDF	105	26 - 123
13C12-234678-HxCDF	104	28 - 136
13C12-123789-HxCDF	102	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	99	26 - 138
13C12-OCDF	90	17 - 157
13C12-1278-TCDD (CRS)	93	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-172-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167499
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL172 SDG#: DX026-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-172-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-172-SA5B-SS-0.0-0.5

LLI Sample # SW 6167499
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:52 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL172 SDG#: DX026-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 22:14	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167500
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL173 SDG#: DX026-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167500
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL173 SDG#: DX026-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0963 JQ	0.0265	1.07	1
11031	12378-PeCDD	40321-76-4	1.41 JB	0.0727	5.33	1
11031	123478-HxCDD	39227-28-6	3.41 JB	0.0719	5.33	1
11031	123678-HxCDD	57653-85-7	16.6 B	0.0735	5.33	1
11031	123789-HxCDD	19408-74-3	9.19 B	0.0733	5.33	1
11031	1234678-HpCDD	35822-46-9	563 B	0.373	5.33	1
11031	OCDD	3268-87-9	16,200 EB	0.248	10.7	1
11031	2378-TCDF	51207-31-9	0.216 JB	0.0439	1.07	1
11031	12378-PeCDF	57117-41-6	0.574 JB	0.0248	5.33	1
11031	23478-PeCDF	57117-31-4	0.721 JB	0.0245	5.33	1
11031	123478-HxCDF	70648-26-9	2.02 JB	0.0419	5.33	1
11031	123678-HxCDF	57117-44-9	0.747 JB	0.0397	5.33	1
11031	123789-HxCDF	72918-21-9	0.827 JB	0.0489	5.33	1
11031	234678-HxCDF	60851-34-5	1.22 JB	0.0396	5.33	1
11031	1234678-HpCDF	67562-39-4	30.5 B	0.0897	5.33	1
11031	1234789-HpCDF	55673-89-7	1.47 JB	0.129	5.33	1
11031	OCDF	39001-02-0	99.5 B	0.0630	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	81	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	87	28 - 130
13C12-1234678-HpCDD	87	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	83	24 - 169
13C12-12378-PeCDF	90	24 - 185
13C12-23478-PeCDF	87	21 - 178
13C12-123478-HxCDF	96	26 - 152
13C12-123678-HxCDF	97	26 - 123
13C12-234678-HxCDF	96	28 - 136

*=This limit was used in the evaluation of the final result

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167500
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL173 SDG#: DX026-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds		**%Rec**	**Windows**			
13C12-123789-HxCDF		93	29 - 147			
13C12-1234678-HpCDF		100	28 - 143			
13C12-1234789-HpCDF		85	26 - 138			
13C12-OCDF		90	17 - 157			
13C12-1278-TCDD (CRS)		86	35 - 197			

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-173-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-173-SA5B-SS-0.0-0.5

LLI Sample # SW 6167500
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL173 SDG#: DX026-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/21/2011 23:11	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167501
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL176 SDG#: DX026-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	4.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167501
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL176 SDG#: DX026-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0734	U	0.0734	1.05	1
11031	12378-PeCDD	40321-76-4	1.08	JBQ	0.249	5.26	1
11031	123478-HxCDD	39227-28-6	1.58	JBQ	0.155	5.26	1
11031	123678-HxCDD	57653-85-7	5.20	JB	0.158	5.26	1
11031	123789-HxCDD	19408-74-3	3.59	JB	0.158	5.26	1
11031	1234678-HpCDD	35822-46-9	130	B	0.216	5.26	1
11031	OCDD	3268-87-9	1,380	B	0.177	10.5	1
11031	2378-TCDF	51207-31-9	6.42	B	0.261	1.05	1
11650	2378-TCDF-Conf	51207-31-9	6.28	B	0.0780	1.05	1
11031	12378-PeCDF	57117-41-6	23.0	B	0.103	5.26	1
11031	23478-PeCDF	57117-31-4	4.69	JB	0.103	5.26	1
11031	123478-HxCDF	70648-26-9	4.68	JB	0.103	5.26	1
11031	123678-HxCDF	57117-44-9	3.10	JB	0.0989	5.26	1
11031	123789-HxCDF	72918-21-9	1.31	JBQ	0.115	5.26	1
11031	234678-HxCDF	60851-34-5	2.46	JB	0.105	5.26	1
11031	1234678-HpCDF	67562-39-4	15.8	B	0.109	5.26	1
11031	1234789-HpCDF	55673-89-7	1.98	JB	0.134	5.26	1
11031	OCDF	39001-02-0	35.8	B	0.0771	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-2378-TCDF-Conf	77	24 - 169
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	83	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	74	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Sample Description: **SL-176-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167501
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL176 SDG#: DX026-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-176-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-176-SA5B-SS-0.0-0.5

LLI Sample # SW 6167501
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL176 SDG#: DX026-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 00:08	Nelson H Risser	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	11008001	02/04/2011 17:17	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167502
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL178 SDG#: DX026-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	22.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167502
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL178 SDG#: DX026-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	1.76 Q	0.282	1.28	1
11031	12378-PeCDD	40321-76-4	11.2 B	0.401	6.42	1
11031	123478-HxCDD	39227-28-6	19.7 B	0.245	6.42	1
11031	123678-HxCDD	57653-85-7	61.1 B	0.260	6.42	1
11031	123789-HxCDD	19408-74-3	43.2 B	0.244	6.42	1
11031	1234678-HpCDD	35822-46-9	1,450 B	0.591	6.42	1
11031	OCDD	3268-87-9	15,300 EB	0.571	12.8	1
11031	2378-TCDF	51207-31-9	2.68 B	0.378	1.28	1
11650	2378-TCDF-Conf	51207-31-9	2.68 B	0.127	1.28	1
11031	12378-PeCDF	57117-41-6	6.59 B	0.169	6.42	1
11031	23478-PeCDF	57117-31-4	5.60 JBQ	0.161	6.42	1
11031	123478-HxCDF	70648-26-9	10.3 B	0.202	6.42	1
11031	123678-HxCDF	57117-44-9	10.9 B	0.192	6.42	1
11031	123789-HxCDF	72918-21-9	2.81 JB	0.214	6.42	1
11031	234678-HxCDF	60851-34-5	11.5 B	0.197	6.42	1
11031	1234678-HpCDF	67562-39-4	213 B	0.221	6.42	1
11031	1234789-HpCDF	55673-89-7	15.8 B	0.246	6.42	1
11031	OCDF	39001-02-0	595 B	0.188	12.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-2378-TCDF-Conf	79	24 - 169
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	75	21 - 178

*=This limit was used in the evaluation of the final result

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167502
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL178 SDG#: DX026-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds		**%Rec**	**Windows**			
13C12-123478-HxCDF		84	26 - 152			
13C12-123678-HxCDF		83	26 - 123			
13C12-234678-HxCDF		86	28 - 136			
13C12-123789-HxCDF		87	29 - 147			
13C12-1234678-HpCDF		83	28 - 143			
13C12-1234789-HpCDF		89	26 - 138			
13C12-OCDF		89	17 - 157			
13C12-1278-TCDD (CRS)		80	35 - 197			

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-178-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-178-SA5B-SS-0.0-0.5

LLI Sample # SW 6167502
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 09:15 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL178 SDG#: DX026-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 04:07	Nelson H Risser	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	11008001	02/04/2011 18:23	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167503
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL186 SDG#: DX026-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167503
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL186 SDG#: DX026-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.123	JQ	0.0592	1.07	1
11031	12378-PeCDD	40321-76-4	0.507	JBQ	0.144	5.37	1
11031	123478-HxCDD	39227-28-6	2.16	JB	0.136	5.37	1
11031	123678-HxCDD	57653-85-7	3.51	JB	0.140	5.37	1
11031	123789-HxCDD	19408-74-3	2.68	JB	0.140	5.37	1
11031	1234678-HpCDD	35822-46-9	171	B	0.265	5.37	1
11031	OCDD	3268-87-9	1,480	B	0.217	10.7	1
11031	2378-TCDF	51207-31-9	0.191	JBQ	0.133	1.07	1
11031	12378-PeCDF	57117-41-6	0.878	JB	0.0600	5.37	1
11031	23478-PeCDF	57117-31-4	0.555	JB	0.0576	5.37	1
11031	123478-HxCDF	70648-26-9	0.511	JB	0.0850	5.37	1
11031	123678-HxCDF	57117-44-9	0.616	JB	0.0808	5.37	1
11031	123789-HxCDF	72918-21-9	0.419	JB	0.0992	5.37	1
11031	234678-HxCDF	60851-34-5	0.718	JBQ	0.0813	5.37	1
11031	1234678-HpCDF	67562-39-4	13.1	B	0.103	5.37	1
11031	1234789-HpCDF	55673-89-7	1.31	JB	0.131	5.37	1
11031	OCDF	39001-02-0	65.8	B	0.108	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	77	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-186-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167503
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL186 SDG#: DX026-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-186-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-186-SA5B-SS-0.0-0.5

LLI Sample # SW 6167503
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:56 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL186 SDG#: DX026-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 05:03	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402A	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167504
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL187 SDG#: DX026-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167504
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL187 SDG#: DX026-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.876 J	0.0702	1.06	1
11031	12378-PeCDD	40321-76-4	6.98 B	0.183	5.30	1
11031	123478-HxCDD	39227-28-6	15.6 B	0.161	5.30	1
11031	123678-HxCDD	57653-85-7	31.0 B	0.169	5.30	1
11031	123789-HxCDD	19408-74-3	27.1 B	0.161	5.30	1
11031	1234678-HpCDD	35822-46-9	1,340 B	0.600	5.30	1
11031	OCDD	3268-87-9	23,500 EB	0.434	10.6	1
11031	2378-TCDF	51207-31-9	0.228 JB	0.136	1.06	1
11031	12378-PeCDF	57117-41-6	1.60 JB	0.0660	5.30	1
11031	23478-PeCDF	57117-31-4	2.32 JB	0.0665	5.30	1
11031	123478-HxCDF	70648-26-9	9.78 B	0.172	5.30	1
11031	123678-HxCDF	57117-44-9	60.4 B	0.162	5.30	1
11031	123789-HxCDF	72918-21-9	1.65 JB	0.198	5.30	1
11031	234678-HxCDF	60851-34-5	18.8 B	0.172	5.30	1
11031	1234678-HpCDF	67562-39-4	334 B	0.166	5.30	1
11031	1234789-HpCDF	55673-89-7	30.3 B	0.217	5.30	1
11031	OCDF	39001-02-0	1,880 B	0.181	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	89	26 - 152
13C12-123678-HxCDF	89	26 - 123
13C12-234678-HxCDF	87	28 - 136

*=This limit was used in the evaluation of the final result

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167504
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL187 SDG#: DX026-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds		%Rec	Windows			
13C12-123789-HxCDF		84	29 - 147			
13C12-1234678-HpCDF		88	28 - 143			
13C12-1234789-HpCDF		82	26 - 138			
13C12-OCDF		83	17 - 157			
13C12-1278-TCDD (CRS)		79	35 - 197			

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-187-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-187-SA5B-SS-0.0-0.5

LLI Sample # SW 6167504
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:19 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL187 SDG#: DX026-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 06:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167505
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL189 SDG#: DX026-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167505
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL189 SDG#: DX026-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0470	JQ	0.0424	1.07	1
11031	12378-PeCDD	40321-76-4	0.414	JBQ	0.0788	5.37	1
11031	123478-HxCDD	39227-28-6	0.542	JBQ	0.0902	5.37	1
11031	123678-HxCDD	57653-85-7	1.68	JB	0.0914	5.37	1
11031	123789-HxCDD	19408-74-3	1.86	JB	0.0857	5.37	1
11031	1234678-HpCDD	35822-46-9	38.3	B	0.139	5.37	1
11031	OCDD	3268-87-9	508	B	0.115	10.7	1
11031	2378-TCDF	51207-31-9	0.102	JB	0.0725	1.07	1
11031	12378-PeCDF	57117-41-6	0.459	JB	0.0394	5.37	1
11031	23478-PeCDF	57117-31-4	0.379	JBQ	0.0378	5.37	1
11031	123478-HxCDF	70648-26-9	0.307	JBQ	0.0734	5.37	1
11031	123678-HxCDF	57117-44-9	0.372	JBQ	0.0670	5.37	1
11031	123789-HxCDF	72918-21-9	0.472	JBQ	0.0800	5.37	1
11031	234678-HxCDF	60851-34-5	0.351	JB	0.0725	5.37	1
11031	1234678-HpCDF	67562-39-4	5.44	B	0.0787	5.37	1
11031	1234789-HpCDF	55673-89-7	0.570	JB	0.111	5.37	1
11031	OCDF	39001-02-0	18.0	B	0.0758	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	65	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	72	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-189-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167505
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL189 SDG#: DX026-14BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167505
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL189 SDG#: DX026-14BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 06:56	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167506
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL189 SDG#: DX026-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167506
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL189 SDG#: DX026-14MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	21.3		0.0475	1.07	1
11031	12378-PeCDD	40321-76-4	112	B	0.0914	5.37	1
11031	123478-HxCDD	39227-28-6	119	B	0.0778	5.37	1
11031	123678-HxCDD	57653-85-7	119	B	0.0796	5.37	1
11031	123789-HxCDD	19408-74-3	123	B	0.0799	5.37	1
11031	1234678-HpCDD	35822-46-9	162	B	0.122	5.37	1
11031	OCDD	3268-87-9	867	B	0.150	10.7	1
11031	2378-TCDF	51207-31-9	24.1	B	0.0708	1.07	1
11031	12378-PeCDF	57117-41-6	118	B	0.0371	5.37	1
11031	23478-PeCDF	57117-31-4	118	B	0.0373	5.37	1
11031	123478-HxCDF	70648-26-9	118	B	0.0958	5.37	1
11031	123678-HxCDF	57117-44-9	117	B	0.0893	5.37	1
11031	123789-HxCDF	72918-21-9	120	B	0.116	5.37	1
11031	234678-HxCDF	60851-34-5	117	B	0.0937	5.37	1
11031	1234678-HpCDF	67562-39-4	124	B	0.0912	5.37	1
11031	1234789-HpCDF	55673-89-7	119	B	0.114	5.37	1
11031	OCDF	39001-02-0	266	B	0.0823	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	90	26 - 152
13C12-123678-HxCDF	94	26 - 123
13C12-234678-HxCDF	90	28 - 136
13C12-123789-HxCDF	87	29 - 147
13C12-1234678-HpCDF	94	28 - 143
13C12-1234789-HpCDF	90	26 - 138
13C12-OCDF	87	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-189-SA5B-SS-0.0-0.5MS Soil**
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167506
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL189 SDG#: DX026-14MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167506
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL189 SDG#: DX026-14MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 07:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167507
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL189 SDG#: DX026-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167507
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL189 SDG#: DX026-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	21.1		0.0712	1.07	1
11031	12378-PeCDD	40321-76-4	111	B	0.0854	5.37	1
11031	123478-HxCDD	39227-28-6	118	B	0.118	5.37	1
11031	123678-HxCDD	57653-85-7	119	B	0.122	5.37	1
11031	123789-HxCDD	19408-74-3	116	B	0.117	5.37	1
11031	1234678-HpCDD	35822-46-9	162	B	0.158	5.37	1
11031	OCDD	3268-87-9	997	B	0.223	10.7	1
11031	2378-TCDF	51207-31-9	23.1	B	0.0994	1.07	1
11031	12378-PeCDF	57117-41-6	120	B	0.0519	5.37	1
11031	23478-PeCDF	57117-31-4	119	B	0.0513	5.37	1
11031	123478-HxCDF	70648-26-9	118	B	0.118	5.37	1
11031	123678-HxCDF	57117-44-9	117	B	0.111	5.37	1
11031	123789-HxCDF	72918-21-9	119	B	0.134	5.37	1
11031	234678-HxCDF	60851-34-5	118	B	0.118	5.37	1
11031	1234678-HpCDF	67562-39-4	124	B	0.175	5.37	1
11031	1234789-HpCDF	55673-89-7	121	B	0.223	5.37	1
11031	OCDF	39001-02-0	268	B	0.109	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	62	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	64	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	80	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	79	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	83	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	77	17 - 157
13C12-1278-TCDD (CRS)	69	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-189-SA5B-SS-0.0-0.5MSD Soil**
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167507
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL189 SDG#: DX026-14MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-189-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-189-SA5B-SS-0.0-0.5

LLI Sample # SW 6167507
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:25 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL189 SDG#: DX026-14MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 08:50	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167508
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL192 SDG#: DX026-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	7.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167508
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL192 SDG#: DX026-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.126	JQ	0.0843	1.08	1
11031	12378-PeCDD	40321-76-4	0.537	JB	0.131	5.38	1
11031	123478-HxCDD	39227-28-6	1.04	JBQ	0.130	5.38	1
11031	123678-HxCDD	57653-85-7	4.22	JBQ	0.132	5.38	1
11031	123789-HxCDD	19408-74-3	2.18	JB	0.130	5.38	1
11031	1234678-HpCDD	35822-46-9	82.4	B	0.216	5.38	1
11031	OCDD	3268-87-9	812	B	0.198	10.8	1
11031	2378-TCDF	51207-31-9	0.431	U	0.431	1.08	1
11031	12378-PeCDF	57117-41-6	0.622	JB	0.128	5.38	1
11031	23478-PeCDF	57117-31-4	1.19	JBQ	0.119	5.38	1
11031	123478-HxCDF	70648-26-9	0.745	JBQ	0.132	5.38	1
11031	123678-HxCDF	57117-44-9	0.877	JB	0.121	5.38	1
11031	123789-HxCDF	72918-21-9	1.11	JB	0.140	5.38	1
11031	234678-HxCDF	60851-34-5	1.45	JB	0.128	5.38	1
11031	1234678-HpCDF	67562-39-4	12.3	B	0.137	5.38	1
11031	1234789-HpCDF	55673-89-7	5.18	JB	0.171	5.38	1
11031	OCDF	39001-02-0	37.2	B	0.101	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	88	32 - 141
13C12-123678-HxCDD	87	28 - 130
13C12-123789-HxCDD	89	28 - 130
13C12-1234678-HpCDD	92	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	85	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	97	26 - 152
13C12-123678-HxCDF	100	26 - 123
13C12-234678-HxCDF	98	28 - 136
13C12-123789-HxCDF	99	29 - 147
13C12-1234678-HpCDF	99	28 - 143
13C12-1234789-HpCDF	97	26 - 138
13C12-OCDF	95	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-192-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167508
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL192 SDG#: DX026-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-192-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-192-SA5B-SS-0.0-0.5

LLI Sample # SW 6167508
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 11:04 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL192 SDG#: DX026-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 09:46	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167509
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL194 SDG#: DX026-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	9.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167509
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL194 SDG#: DX026-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0483	U	0.0483	1.11	1
11031	12378-PeCDD	40321-76-4	0.250	JBQ	0.0808	5.54	1
11031	123478-HxCDD	39227-28-6	0.463	JB	0.0873	5.54	1
11031	123678-HxCDD	57653-85-7	1.42	JB	0.0909	5.54	1
11031	123789-HxCDD	19408-74-3	0.988	JBQ	0.0874	5.54	1
11031	1234678-HpCDD	35822-46-9	43.8	B	0.133	5.54	1
11031	OCDD	3268-87-9	478	B	0.118	11.1	1
11031	2378-TCDF	51207-31-9	0.218	JB	0.113	1.11	1
11031	12378-PeCDF	57117-41-6	0.570	JB	0.0728	5.54	1
11031	23478-PeCDF	57117-31-4	0.246	JB	0.0707	5.54	1
11031	123478-HxCDF	70648-26-9	0.410	JB	0.0763	5.54	1
11031	123678-HxCDF	57117-44-9	0.483	JB	0.0726	5.54	1
11031	123789-HxCDF	72918-21-9	0.359	JB	0.0824	5.54	1
11031	234678-HxCDF	60851-34-5	0.476	JB	0.0738	5.54	1
11031	1234678-HpCDF	67562-39-4	7.14	B	0.0722	5.54	1
11031	1234789-HpCDF	55673-89-7	0.619	JBQ	0.0875	5.54	1
11031	OCDF	39001-02-0	18.9	B	0.0602	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	81	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	84	32 - 141
13C12-123678-HxCDD	85	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	83	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	94	26 - 152
13C12-123678-HxCDF	95	26 - 123
13C12-234678-HxCDF	95	28 - 136
13C12-123789-HxCDF	98	29 - 147
13C12-1234678-HpCDF	96	28 - 143
13C12-1234789-HpCDF	96	26 - 138
13C12-OCDF	94	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-194-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167509
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL194 SDG#: DX026-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-194-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-194-SA5B-SS-0.0-0.5

LLI Sample # SW 6167509
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:40 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL194 SDG#: DX026-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 10:43	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167510
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL196 SDG#: DX026-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167510
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL196 SDG#: DX026-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0467	U	0.0467	1.05	1
11031	12378-PeCDD	40321-76-4	0.351	JBQ	0.0996	5.27	1
11031	123478-HxCDD	39227-28-6	0.420	JB	0.0899	5.27	1
11031	123678-HxCDD	57653-85-7	1.30	JB	0.0911	5.27	1
11031	123789-HxCDD	19408-74-3	1.22	JB	0.0909	5.27	1
11031	1234678-HpCDD	35822-46-9	27.4	B	0.113	5.27	1
11031	OCDD	3268-87-9	356	B	0.125	10.5	1
11031	2378-TCDF	51207-31-9	0.165	JBQ	0.122	1.05	1
11031	12378-PeCDF	57117-41-6	0.807	JB	0.0708	5.27	1
11031	23478-PeCDF	57117-31-4	0.670	JB	0.0698	5.27	1
11031	123478-HxCDF	70648-26-9	0.493	JBQ	0.0888	5.27	1
11031	123678-HxCDF	57117-44-9	0.531	JB	0.0799	5.27	1
11031	123789-HxCDF	72918-21-9	0.431	JB	0.0972	5.27	1
11031	234678-HxCDF	60851-34-5	0.428	JB	0.0848	5.27	1
11031	1234678-HpCDF	67562-39-4	4.22	JB	0.0563	5.27	1
11031	1234789-HpCDF	55673-89-7	0.451	JB	0.0776	5.27	1
11031	OCDF	39001-02-0	10.6	B	0.0662	10.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	94	26 - 152
13C12-123678-HxCDF	98	26 - 123
13C12-234678-HxCDF	92	28 - 136
13C12-123789-HxCDF	94	29 - 147
13C12-1234678-HpCDF	100	28 - 143
13C12-1234789-HpCDF	91	26 - 138
13C12-OCDF	85	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-196-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167510
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL196 SDG#: DX026-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-196-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-196-SA5B-SS-0.0-0.5

LLI Sample # SW 6167510
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:12 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL196 SDG#: DX026-17

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 11:39	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167511
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL198 SDG#: DX026-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167511
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL198 SDG#: DX026-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0909	J	0.0682	1.07	1
11031	12378-PeCDD	40321-76-4	0.529	JB	0.128	5.34	1
11031	123478-HxCDD	39227-28-6	1.12	JB	0.123	5.34	1
11031	123678-HxCDD	57653-85-7	2.67	JB	0.125	5.34	1
11031	123789-HxCDD	19408-74-3	2.29	JBQ	0.130	5.34	1
11031	1234678-HpCDD	35822-46-9	82.2	B	0.218	5.34	1
11031	OCDD	3268-87-9	1,130	B	0.204	10.7	1
11031	2378-TCDF	51207-31-9	0.247	JB	0.112	1.07	1
11031	12378-PeCDF	57117-41-6	0.544	JB	0.0598	5.34	1
11031	23478-PeCDF	57117-31-4	0.642	JB	0.0567	5.34	1
11031	123478-HxCDF	70648-26-9	0.560	JBQ	0.0973	5.34	1
11031	123678-HxCDF	57117-44-9	0.651	JB	0.0907	5.34	1
11031	123789-HxCDF	72918-21-9	0.405	JBQ	0.105	5.34	1
11031	234678-HxCDF	60851-34-5	0.727	JBQ	0.0923	5.34	1
11031	1234678-HpCDF	67562-39-4	11.4	B	0.0843	5.34	1
11031	1234789-HpCDF	55673-89-7	1.12	JBQ	0.110	5.34	1
11031	OCDF	39001-02-0	51.9	B	0.106	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	81	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	81	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	76	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-198-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167511
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL198 SDG#: DX026-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-198-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-198-SA5B-SS-0.0-0.5

LLI Sample # SW 6167511
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 10:59 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL198 SDG#: DX026-18

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 12:36	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167512
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL199 SDG#: DX026-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167512
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL199 SDG#: DX026-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0700	JQ	0.0502	1.06	1
11031	12378-PeCDD	40321-76-4	0.294	JBQ	0.106	5.32	1
11031	123478-HxCDD	39227-28-6	0.319	JB	0.0796	5.32	1
11031	123678-HxCDD	57653-85-7	1.26	JB	0.0840	5.32	1
11031	123789-HxCDD	19408-74-3	1.37	JB	0.0812	5.32	1
11031	1234678-HpCDD	35822-46-9	20.7	B	0.102	5.32	1
11031	OCDD	3268-87-9	262	B	0.0982	10.6	1
11031	2378-TCDF	51207-31-9	0.161	JBQ	0.119	1.06	1
11031	12378-PeCDF	57117-41-6	1.78	JB	0.0521	5.32	1
11031	23478-PeCDF	57117-31-4	1.44	JB	0.0535	5.32	1
11031	123478-HxCDF	70648-26-9	0.393	JBQ	0.0676	5.32	1
11031	123678-HxCDF	57117-44-9	0.652	JB	0.0590	5.32	1
11031	123789-HxCDF	72918-21-9	0.456	JB	0.0738	5.32	1
11031	234678-HxCDF	60851-34-5	0.941	JB	0.0631	5.32	1
11031	1234678-HpCDF	67562-39-4	3.84	JB	0.0466	5.32	1
11031	1234789-HpCDF	55673-89-7	0.423	JB	0.0631	5.32	1
11031	OCDF	39001-02-0	9.64	JB	0.0602	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	92	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	92	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	78	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-199-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167512
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL199 SDG#: DX026-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-199-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-199-SA5B-SS-0.0-0.5

LLI Sample # SW 6167512
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 13:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL199 SDG#: DX026-19

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 16:35	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167513
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL202 SDG#: DX026-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	6.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167513
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL202 SDG#: DX026-20*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0725	JQ	0.0701	1.07	1
11031	12378-PeCDD	40321-76-4	0.351	JBQ	0.100	5.36	1
11031	123478-HxCDD	39227-28-6	0.578	JBQ	0.113	5.36	1
11031	123678-HxCDD	57653-85-7	2.71	JBQ	0.119	5.36	1
11031	123789-HxCDD	19408-74-3	1.31	JB	0.119	5.36	1
11031	1234678-HpCDD	35822-46-9	51.5	B	0.145	5.36	1
11031	OCDD	3268-87-9	559	B	0.130	10.7	1
11031	2378-TCDF	51207-31-9	0.194	JBQ	0.155	1.07	1
11031	12378-PeCDF	57117-41-6	0.574	JB	0.0637	5.36	1
11031	23478-PeCDF	57117-31-4	0.443	JB	0.0606	5.36	1
11031	123478-HxCDF	70648-26-9	0.351	JBQ	0.0792	5.36	1
11031	123678-HxCDF	57117-44-9	0.366	JBQ	0.0750	5.36	1
11031	123789-HxCDF	72918-21-9	0.376	JBQ	0.0818	5.36	1
11031	234678-HxCDF	60851-34-5	0.687	JB	0.0755	5.36	1
11031	1234678-HpCDF	67562-39-4	5.92	B	0.0552	5.36	1
11031	1234789-HpCDF	55673-89-7	0.565	JB	0.0672	5.36	1
11031	OCDF	39001-02-0	18.6	B	0.0748	10.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	47	25 - 164
13C12-12378-PeCDD	53	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	63	28 - 130
13C12-123789-HxCDD	64	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	72	17 - 157
13C12-2378-TCDF	48	24 - 169
13C12-12378-PeCDF	54	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	74	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-202-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167513
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL202 SDG#: DX026-20*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-202-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-202-SA5B-SS-0.0-0.5

LLI Sample # SW 6167513
LLI Group # 1225976
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/16/2010 14:23 by PH

Submitted: 12/17/2010 09:40
Reported: 02/21/2011 16:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL202 SDG#: DX026-20*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11008001	01/22/2011 17:32	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11008001	01/08/2011 14:45	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10357162402B	12/23/2010 20:18	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225976
Reported: 02/21/11 at 04:53 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10357162402A	Sample number(s): 6167492-6167503								
28a Moisture Content by 160.3					100		80-120		
Batch number: 10357162402B	Sample number(s): 6167504-6167513								
28a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11008001	Sample number(s): 6167492-6167513								
2378-TCDD	0.00900 U	0.00900	1.00	ng/kg	100		67-158		
12378-PeCDD	0.0325 J	0.0117	5.00	ng/kg	102		70-142		
123478-HxCDD	0.0377 J	0.00980	5.00	ng/kg	102		70-164		
123678-HxCDD	0.0525 J	0.0100	5.00	ng/kg	99		76-134		
123789-HxCDD	0.0432 J	0.0102	5.00	ng/kg	100		64-162		
1234678-HpCDD	0.172 J	0.0136	5.00	ng/kg	99		70-140		
OCDD	0.339 J	0.0171	10.0	ng/kg	100		78-144		
2378-TCDF	0.0100 J	0.00910	1.00	ng/kg	104		75-158		
2378-TCDF-Conf	0.0580 J	0.0301	1.00	ng/kg					
12378-PeCDF	0.0530 J	0.00550	5.00	ng/kg	100		80-134		
23478-PeCDF	0.0835 J	0.00540	5.00	ng/kg	100		68-160		
123478-HxCDF	0.0876 J	0.0100	5.00	ng/kg	96		72-134		
123678-HxCDF	0.0702 J	0.00900	5.00	ng/kg	95		84-130		
123789-HxCDF	0.0636 J	0.0112	5.00	ng/kg	94		78-130		
234678-HxCDF	0.108 J	0.00960	5.00	ng/kg	94		70-156		
1234678-HpCDF	0.295 J	0.00560	5.00	ng/kg	96		82-122		
1234789-HpCDF	0.0694 J	0.00820	5.00	ng/kg	96		78-138		
OCDF	0.270 J	0.0174	10.0	ng/kg	97		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10357162402A	Sample number(s): 6167492-6167503					BKG: P167471			
28a Moisture Content by 160.3						25.8	24.4	6	20
Batch number: 10357162402B	Sample number(s): 6167504-6167513					BKG: P167481			
28a Moisture Content by 160.3						6.9	6.8	2	20
Batch number: 11008001	Sample number(s): 6167492-6167513 UNSPK: 6167505								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225976
Reported: 02/21/11 at 04:53 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2378-TCDD	99	98	67-158	1	25				
12378-PeCDD	104	103	70-142	0	25				
123478-HxCDD	110	109	70-164	1	25				
123678-HxCDD	109	109	76-134	0	25				
123789-HxCDD	113	106	64-162	6	25				
1234678-HpCDD	115	115	70-140	0	25				
OCDD	167*	228*	78-144	14	25				
2378-TCDF	112	107	75-158	5	25				
12378-PeCDF	109	111	80-134	2	25				
23478-PeCDF	110	110	68-160	0	25				
123478-HxCDF	110	110	72-134	0	25				
123678-HxCDF	109	109	84-130	0	25				
123789-HxCDF	111	110	78-130	1	25				
234678-HxCDF	109	110	70-156	1	25				
1234678-HpCDF	110	110	82-122	0	25				
1234789-HpCDF	111	112	78-138	1	25				
OCDF	115	116	63-170	1	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11008001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6167492	76	77	80	83	79	79
6167493	75	77	77	80	76	78
6167494	67	72	74	77	72	73
6167495	69	74	80	82	83	82
6167496	73	80	90	92	89	87
6167497	73	80	91	89	90	91
6167498	75	80	89	89	89	89
6167499	82	94	103	105	104	102
6167500	81	87	96	97	96	93
6167501	70	70	83	82	79	81
6167502	72	75	84	83	86	87
6167503	61	68	79	79	79	76
6167504	70	77	89	89	87	84
6167505	67	69	79	81	79	78
6167506	75	78	90	94	90	87
6167507	60	66	80	81	79	77
6167508	82	84	97	100	98	99
6167509	81	83	94	95	95	98
6167510	77	79	94	98	92	94
6167511	66	74	81	82	80	81
6167512	77	76	85	92	87	85
6167513	47	55	68	69	71	73
Blank	73	77	81	87	81	81

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225976
Reported: 02/21/11 at 04:53 PM

Surrogate Quality Control

MS	75	78	90	94	90	87
MSD	60	66	80	81	79	77
OPR	52	54	58	61	58	56
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6167492	75	64	48	81	75	82
6167493	75	63	50	83	76	79
6167494	72	67	55	78	71	77
6167495	79	80	79	79	70	74
6167496	89	80	83	80	76	80
6167497	87	88	76	82	76	80
6167498	87	85	78	82	77	81
6167499	104	99	90	93	90	94
6167500	100	85	90	86	85	87
6167501	80	78	75	74	68	72
6167502	83	89	89	80	70	77
6167503	77	74	73	76	64	71
6167504	88	82	83	79	73	80
6167505	85	75	72	71	65	73
6167506	94	90	87	82	73	80
6167507	83	78	77	69	62	72
6167508	99	97	95	87	80	88
6167509	96	96	94	83	79	84
6167510	100	91	85	83	76	85
6167511	80	76	76	78	69	75
6167512	92	83	78	79	73	81
6167513	73	73	74	85	53	64
Blank	84	70	55	89	76	84
MS	94	90	87	82	73	80
MSD	83	78	77	69	62	72
OPR	56	49	37	59	53	58
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6167492	80	79	71	55	80	81
6167493	77	79	70	57	79	81
6167494	75	74	71	60	73	75
6167495	73	73	73	77	73	75
6167496	80	80	79	79	76	83
6167497	80	80	78	70	77	81
6167498	77	79	78	73	76	80
6167499	93	92	92	86	86	95
6167500	87	87	87	95	83	90
6167501	71	71	74	73	70	73
6167502	72	74	78	85	75	74
6167503	70	69	70	71	67	68
6167504	78	78	78	84	77	79
6167505	71	73	74	72	67	70
6167506	80	79	84	81	79	84
6167507	69	71	74	72	64	66
6167508	87	89	92	92	85	86

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1225976
Reported: 02/21/11 at 04:53 PM

Surrogate Quality Control

6167509	85	86	89	90	83	83
6167510	84	85	86	85	82	84
6167511	73	74	73	73	72	73
6167512	78	80	80	80	76	83
6167513	63	64	67	72	48	54
Blank	83	83	77	63	76	81
MS	80	79	84	81	79	84
MSD	69	71	74	72	64	66
OPR	59	60	51	40	53	57
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

	13C12-2378-TCDF-Conf
6167492	
6167493	
6167494	
6167495	79
6167496	
6167497	
6167498	
6167499	
6167500	
6167501	77
6167502	79
6167503	
6167504	
6167505	
6167506	
6167507	
6167508	
6167509	
6167510	
6167511	
6167512	
6167513	
Blank	86
MS	
MSD	
OPR	
Limits:	24-169

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1225976 6167492-513

CHAIN OF CUSTODY RECORD

CDM | SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-EPH EPA 8015B Mod.	*Metals EPA 6010/6020/8887471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	PetroMonitor Confirmation by EPA 8850	**Pesticides EPA 8081A (surface soil only)	**Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
DUP07-SA5B-QC-121610	12.16.10	1129	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									DUP
EB04-SA5B-121610	12.16.10	1215	water	none	6-1 liter ambers			X						X	X			X	X										rinsate
EB04-SA5B-121610	12.16.10	1215	water	none	1-500 ml poly							X	X			X									X				rinsate
EB04-SA5B-121610	12.16.10	1215	water	HNO3	1-500 ml poly						X																		rinsate
EB16-SA5B-121610	12.16.10	1120	water	none	4-40 mL clear VOA vials															X							X		rinsate
EB16-SA5B-121610	12.16.10	1120	water	HCl	3-40 mL clear VOA vials				X												X	X			X				rinsate
EB16-SA5B-121610	12.16.10	1120	water	none	1-250 mL glass																								rinsate
EB16-SA5B-121610	12.16.10	1120	water	none	4-1 liter ambers					X																			rinsate
EB16-SA5B-121610	12.16.10	1120	water	none	1-250 mL amber																								rinsate
EB16-SA5B-121610	12.16.10	1120	water	NaOH	1-500 ml poly																								rinsate
SED-011-SIV-SD-0.0-0.5	12.16.10	1418	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SED-013-SIV-SD-0.0-0.5	12.16.10	1526	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-017-SIV-SD-0.0-0.5	12.16.10	1045	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-019-SIV-SD-0.0-0.5	12.16.10	0930	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-020-SIV-SD-0.0-0.5	12.16.10	1140	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-040-SA5B-SB-1.5-2.5	12.16.10	1007	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-040-SA5B-SB-2.0	12.16.10	1004	soil	none	5 Encore Samplers	X	X		X																				
SL-040-SA5B-SB-9.0-10.0	12.16.10	1015	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-040-SA5B-SB-9.5	12.16.10	1011	soil	none	5 Encore Samplers	X	X		X																				
SL-041-SA5B-SB-1.5-2.5	12.16.10	1144	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-041-SA5B-SB-2.0	12.16.10	1140	soil	none	5 Encore Samplers	X	X		X																				
SL-041-SA5B-SB-8.5	12.16.10	1148	soil	none	5 Encore Samplers	X	X		X																				
SL-041-SA5B-SB-8.0-9.0	12.16.10	1155	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-042-SA5B-SB-2.5-3.5	12.16.10	1410	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-042-SA5B-SB-3.0	12.16.10	1404	soil	none	5 Encore Samplers	X	X		X																				
SL-042-SA5B-SB-8.0-9.0	12.16.10	1418	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-042-SA5B-SB-8.5	12.16.10	1413	soil	none	5 Encore Samplers	X	X		X																				
SL-043-SA5B-SB-2.5-3.5	12.16.10	1549	soil	none	3 4 oz. jars & 3 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-043-SA5B-SB-3.0	12.16.10	1545	soil	none	5 Encore Samplers	X	X		X																				
SL-147-SA5B-SS-0.0-0.5	12.16.10	0855	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-169-SA5B-SS-0.0-0.5	12.16.10	1337	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-172-SA5B-SS-0.0-0.5	12.16.10	1352	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-173-SA5B-SS-0.0-0.5	12.16.10	1312	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-176-SA5B-SS-0.0-0.5	12.16.10	0925	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-178-SA5B-SS-0.0-0.5	12.16.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-186-SA5B-SS-0.0-0.5	12.16.10	1056	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-187-SA5B-SS-0.0-0.5	12.16.10	1119	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-189-SA5B-SS-0.0-0.5MS	12.16.10	1125	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X										
SL-192-SA5B-SS-0.0-0.5	12.16.10	1104	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										MS/MSD
SL-194-SA5B-SS-0.0-0.5	12.16.10	1340	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-196-SA5B-SS-0.0-0.5	12.16.10	1312	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-198-SA5B-SS-0.0-0.5	12.16.10	1059	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-199-SA5B-SS-0.0-0.5	12.16.10	1323	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-202-SA5B-SS-0.0-0.5	12.16.10	1423	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-205-SA5B-SS-0.0-0.5	12.16.10	1432	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-284-SA5B-SS-0.0-0.5	12.16.10	1413	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-285-SA5B-SS-0.0-0.5	12.16.10	0920	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-286-SA5B-SS-0.0-0.5	12.16.10	0902	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-304-SA5B-SS-0.0-0.5	12.16.10	1510	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-305-SA5B-SS-0.0-0.5	12.16.10	1450	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
TB-121610	12.16.10	0800	water	HCl	4-40 mL clear VOA vials	X	X		X																				trip blank

Relinquished by: *(Signature)* — Date/Time 12.16.10 | 1700 — Received for Laboratory by: *(Signature)* — Date/Time 12/17/10 2:40

Received by: *(Signature)* — Date/Time — Airbill No. 00732992

Laboratory: Lancaster Laboratories, Inc.

No. of coolers = 6

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

January 27, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/18/2010
Group Number: 1226239
SDG: DE045
PO Number: 1203-004-007-AL
Release Number: Tracking #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
DUP08-SA5B-QC-121710 Soil	6169016
EB05-SA5B-121710 Water	6169017
EB01-SIV-121710 Water	6169018
SED-014-SIV-SD-0.0-0.5 Sediment	6169019
SED-012-SIV-SD-0.0-0.5 Sediment	6169020
SED-006-SIV-SD-0.0-0.5 Sediment	6169021
SED-001-SIV-SD-0.0-0.5 Sediment	6169022
SED-004-SIV-SD-0.0-0.5 Sediment	6169023
SL-282-SA5B-SB-4.0-5.0 Soil	6169024
SL-282-SA5B-SB-7.0-8.0 Soil	6169025
SL-281-SA5B-SB-4.0-5.0 Soil	6169026
SL-281-SA5B-SB-8.0-9.0 Soil	6169027
SL-026-SA5B-SB-4.0-5.0 Soil	6169028
SL-026-SA5B-SB-9.0-10 Soil	6169029
TB-121710 Water	6169030

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	CDM Federal Services Program	Attn: Todd Burgesser
1 COPY TO	Data Package Group	

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

Robert Heisey

Robert Heisey
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169016
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4501 SDG#: DE045-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	560		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U	190	560		1
04688	Benzyl alcohol	100-51-6	190	U	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190		1
04688	4-Chloroaniline	106-47-8	75	U	75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560		1
04688	2,4-Dinitrophenol	51-28-5	750	U	750	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	37	U	37	190		1
04688	4-Methylphenol	106-44-5	37	U	37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	37	U	37	190		1
04688	4-Nitroaniline	100-01-6	75	U	75	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	560		1
04688	Phenol	108-95-2	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169016
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4501 SDG#: DE045-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.75	U	0.75	1.9		1
10138	Acenaphthylene	208-96-8	0.82	J	0.37	1.9		1
10138	Anthracene	120-12-7	2.7		0.37	1.9		1
10138	Benzo(a)anthracene	56-55-3	5.8		0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	7.4		0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	27		0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	18		0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U	0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	7.6	J	6.7	20		1
10138	Di-n-butylphthalate	84-74-2	6.7	U	6.7	20		1
10138	Chrysene	218-01-9	11		0.37	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	1.3	J	0.75	1.9		1
10138	Diethylphthalate	84-66-2	6.7	U	6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7	U	6.7	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	14	J	6.7	20		1
10138	Fluoranthene	206-44-0	13		0.75	1.9		1
10138	Fluorene	86-73-7	0.75	U	0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	9.3		0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.94	J	0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	2.2		0.75	1.9		1
10138	Naphthalene	91-20-3	2.1		0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U	0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.7	U	6.7	20		1
10138	Phenanthrene	85-01-8	6.2		0.75	1.9		1
10138	Pyrene	129-00-0	14		0.75	1.9		1

Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0		1
10401	Dalapon	75-99-0	4.9	U	4.9	10		1
10401	2,4-DB	94-82-6	0.70	U	0.70	1.9		1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.3		1
10401	Dinoseb	88-85-7	0.90	U	0.90	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U	0.90	1.9		1
10401	MCPA	94-74-6	85	U	85	280		1
10401	MCPP (Mecoprop)	93-65-2	84	U	84	280		1
10401	2,4,5-T	93-76-5	0.092	U	0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.084	U	0.084	0.19		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169016
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4501 SDG#: DE045-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.37	U	0.37	0.93		5
01363	Alpha BHC	319-84-6	0.19	U	0.19	0.93		5
01363	Beta BHC	319-85-7	0.34	U	0.34	0.93		5
01363	Gamma BHC - Lindane	58-89-9	0.19	U	0.19	0.93		5
01363	Chlordane	57-74-9	4.5	U	4.5	19		5
01363	p,p-DDD	72-54-8	3.3	U	3.3	3.3		5
01363	p,p-DDE	72-55-9	0.37	U	0.37	1.9		5
01363	p,p-DDT	50-29-3	4.5	U	4.5	4.5		5
01363	Delta BHC	319-86-8	0.20	U	0.20	0.93		5
01363	Dieldrin	60-57-1	2.1		0.37	1.9		5
01363	Endosulfan I	959-98-8	0.25	U	0.25	0.93		5
01363	Endosulfan II	33213-65-9	1.6	U	1.6	1.9		5
01363	Endosulfan Sulfate	1031-07-8	0.37	U	0.37	1.9		5
01363	Endrin	72-20-8	0.37	U	0.37	1.9		5
01363	Endrin Aldehyde	7421-93-4	0.61	U	0.61	1.9		5
01363	Endrin Ketone	53494-70-5	0.37	U	0.37	1.9		5
01363	Heptachlor	76-44-8	0.34	U	0.34	0.93		5
01363	Heptachlor Epoxide	1024-57-3	0.19	U	0.19	0.93		5
01363	Methoxychlor	72-43-5	1.9	U	1.9	9.3		5
01363	Mirex	2385-85-5	0.37	U	0.37	1.9		5
01363	Toxaphene	8001-35-2	12	U	12	37		5

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	11		1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9		1
10225	PCB-1232	11141-16-5	0.58	U	0.58	1.9		1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9		1
10225	PCB-1254	11097-69-1	34		0.37	1.9		1
10225	PCB-1260	11096-82-5	13		0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,100		5.37	21.4		1
07914	Boron	7440-42-8	7.84		0.950	5.34		1
01650	Calcium	7440-70-2	6,300		6.54	21.4		1
01654	Iron	7439-89-6	27,300		5.03	21.4		1
01656	Lithium	7439-93-2	38.4		0.23	2.1		1
01657	Magnesium	7439-95-4	5,940		2.71	10.7		1
06958	Manganese	7439-96-5	344		0.0833	0.534		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169016
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4501 SDG#: DE045-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10145	Phosphorus	7723-14-0	536		0.598	10.7		1
01662	Potassium	7440-09-7	4,320		19.2	53.4		1
01667	Sodium	7440-23-5	120		39.8	107		1
07968	Strontium	7440-24-6	39.9		0.0662	0.534		1
06969	Tin	7440-31-5	3.08	J	1.07	10.7		1
06970	Titanium	7440-32-6	1,320		0.406	1.07		1
10146	Zirconium	7440-67-7	4.80	J	0.897	5.34		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.113	J	0.0659	0.220		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	11.8		0.0659	0.440		2
06126	Barium	7440-39-3	156		0.119	0.440		2
06127	Beryllium	7440-41-7	0.958		0.0176	0.110		2
06128	Cadmium	7440-43-9	1.70		0.0396	0.110		2
06131	Chromium	7440-47-3	47.2		0.132	0.440		2
06132	Cobalt	7440-48-4	8.63		0.0220	0.110		2
06133	Copper	7440-50-8	39.6		0.0725	0.440		2
06135	Lead	7439-92-1	21.6		0.0114	0.220		2
06138	Molybdenum	7439-98-7	1.31		0.0550	0.110		2
06139	Nickel	7440-02-0	23.4		0.110	0.440		2
06141	Selenium	7782-49-2	0.266	J	0.0440	0.440		2
06142	Silver	7440-22-4	34.3		0.0132	0.110		2
06145	Thallium	7440-28-0	0.403		0.0330	0.110		2
06148	Vanadium	7440-62-2	59.1		0.0242	0.110		2
06149	Zinc	7440-66-6	151		0.615	3.30		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0498	J	0.0031	0.107		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.9		0.90	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1	U	10.1	33.6		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.59	J	0.22	1.1		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	480		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169016
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4501 SDG#: DE045-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.03	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	10.8	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011	12:03	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011	00:41	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010	06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010	08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620013A	01/01/2011	04:23	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/08/2011	02:21	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011	02:18	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610029A	12/28/2010	07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010	06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620013A	12/29/2010	00:45	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010	17:45	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010	17:45	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010	17:45	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010	17:45	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010	17:45	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010	17:45	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010	17:45	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010	17:45	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010	17:45	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010	17:45	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010	17:45	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010	17:45	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169016
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4501 SDG#: DE045-01FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 17:45	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:19	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:19	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:19	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:29	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 18:09	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 17:29	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 12:30	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB05-SA5B-121710 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169017
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4502 SDG#: DE045-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l		ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1	U	1	5		1
04678	Benzidine	92-87-5	20	U	20	60		1
04678	Benzoic acid	65-85-0	6	U	6	15		1
04678	Benzyl alcohol	100-51-6	5	U	5	15		1
04678	4-Bromophenyl-phenylether	101-55-3	1	U	1	5		1
04678	Carbazole	86-74-8	1	U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1	U	1	5		1
04678	4-Chloroaniline	106-47-8	1	U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1	U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2	U	2	5		1
04678	2-Chlorophenol	95-57-8	1	U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2	U	2	5		1
04678	Dibenzofuran	132-64-9	1	U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1	U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3	U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3	U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	15		1
04678	2,4-Dinitrophenol	51-28-5	10	U	10	30		1
04678	2,4-Dinitrotoluene	121-14-2	1	U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1	U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1	U	1	5		1
04678	Hexachlorobenzene	118-74-1	1	U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1	U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5	U	5	15		1
04678	Hexachloroethane	67-72-1	1	U	1	5		1
04678	Isophorone	78-59-1	1	U	1	5		1
04678	2-Methylphenol	95-48-7	1	U	1	5		1
04678	4-Methylphenol	106-44-5	2	U	2	5		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1	U	1	5		1
04678	3-Nitroaniline	99-09-2	1	U	1	5		1
04678	4-Nitroaniline	100-01-6	1	U	1	5		1
04678	Nitrobenzene	98-95-3	1	U	1	5		1
04678	2-Nitrophenol	88-75-5	1	U	1	5		1
04678	4-Nitrophenol	100-02-7	10	U	10	30		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2	U	2	5		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04678	Pentachlorophenol	87-86-5	3	U	3	15		1
04678	Phenol	108-95-2	1	U	1	5		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5B-121710 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169017
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4502 SDG#: DE045-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l		ug/l	ug/l	ug/l	
04678	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1	U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1	U	1	5		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
1,3-dichlorobenzene
1,4-dichlorobenzene

GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l		ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.010	U	0.010	0.051		1
10137	Acenaphthylene	208-96-8	0.010	U	0.010	0.051		1
10137	Anthracene	120-12-7	0.010	U	0.010	0.051		1
10137	Benzo(a)anthracene	56-55-3	0.010	U	0.010	0.051		1
10137	Benzo(a)pyrene	50-32-8	0.010	U	0.010	0.051		1
10137	Benzo(b)fluoranthene	205-99-2	0.010	U	0.010	0.051		1
10137	Benzo(g,h,i)perylene	191-24-2	0.010	U	0.010	0.051		1
10137	Benzo(k)fluoranthene	207-08-9	0.010	U	0.010	0.051		1
10137	Butylbenzylphthalate	85-68-7	0.051	U	0.051	1.0		1
10137	Di-n-butylphthalate	84-74-2	0.50	J	0.051	1.0		1
10137	Chrysene	218-01-9	0.010	U	0.010	0.051		1
10137	Dibenz(a,h)anthracene	53-70-3	0.010	U	0.010	0.051		1
10137	Diethylphthalate	84-66-2	0.11	J	0.051	1.0		1
10137	Dimethylphthalate	131-11-3	0.051	U	0.051	1.0		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.33	J	0.051	1.0		1
10137	Fluoranthene	206-44-0	0.010	U	0.010	0.051		1
10137	Fluorene	86-73-7	0.010	U	0.010	0.051		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.010	U	0.010	0.051		1
10137	1-Methylnaphthalene	90-12-0	0.010	U	0.010	0.051		1
10137	2-Methylnaphthalene	91-57-6	0.010	U	0.010	0.051		1
10137	Naphthalene	91-20-3	0.029	J	0.010	0.051		1
10137	N-Nitrosodimethylamine	62-75-9	0.010	U	0.010	0.051		1
10137	Di-n-octylphthalate	117-84-0	0.051	U	0.051	1.0		1
10137	Phenanthrene	85-01-8	0.010	U	0.010	0.051		1
10137	Pyrene	129-00-0	0.010	U	0.010	0.051		1

The recoveries of several compounds were outside of QC limits in the LCS/LCSD.
The following compounds were detected in the method blank at the respective concentrations of:
di-n-butylphthalate .16 ug/l
bis(2-ethylhexyl)phthalate .19 ug/l
These blank values were not subtracted from the analytical results.
Sufficient sample was unavailable to repeat the analysis.

Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	ug/l	
10407	2,4-D	94-75-7	0.17	U	0.17	0.52		1
10407	Dalapon	75-99-0	0.26	U	0.26	1.3		1
10407	2,4-DB	94-82-6	0.31	U	0.31	1.0		1
10407	Dicamba	1918-00-9	0.084	U	0.084	0.31		1
10407	Dinoseb	88-85-7	0.10	U	0.10	0.52		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5B-121710 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169017
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4502 SDG#: DE045-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	ug/l	
10407	2,4-DP (Dichlorprop)	120-36-5	0.17	U	0.17	0.52		1
10407	MCPA	94-74-6	310	U	310	1,000		1
10407	MCPP	93-65-2	52	U	52	210		1
10407	2,4,5-T	93-76-5	0.016	U	0.016	0.052		1
10407	2,4,5-TP	93-72-1	0.010	U	0.010	0.052		1
Pesticides/PCBs	**SW-846 8081A**		ug/l		ug/l	ug/l	ug/l	
00177	Aldrin	309-00-2	0.0021	U	0.0021	0.010		1
00177	Alpha BHC	319-84-6	0.0031	U	0.0031	0.010		1
00177	Beta BHC	319-85-7	0.0030	U	0.0030	0.010		1
00177	Gamma BHC - Lindane	58-89-9	0.0021	U	0.0021	0.010		1
00177	Chlordane	57-74-9	0.12	U	0.12	0.52		1
00177	p,p-DDD	72-54-8	0.0052	U	0.0052	0.021		1
00177	p,p-DDE	72-55-9	0.0052	U	0.0052	0.021		1
00177	p,p-DDT	50-29-3	0.0052	U	0.0052	0.021		1
00177	Delta BHC	319-86-8	0.0030	U	0.0030	0.010		1
00177	Dieldrin	60-57-1	0.0055	U	0.0055	0.021		1
00177	Endosulfan I	959-98-8	0.0045	U	0.0045	0.010		1
00177	Endosulfan II	33213-65-9	0.016	U	0.016	0.021		1
00177	Endosulfan Sulfate	1031-07-8	0.0060	U	0.0060	0.021		1
00177	Endrin	72-20-8	0.0084	U	0.0084	0.021		1
00177	Endrin Aldehyde	7421-93-4	0.021	U	0.021	0.10		1
00177	Endrin Ketone	53494-70-5	0.0052	U	0.0052	0.021		1
00177	Heptachlor	76-44-8	0.0027	U	0.0027	0.010		1
00177	Heptachlor Epoxide	1024-57-3	0.0024	U	0.0024	0.010		1
00177	Methoxychlor	72-43-5	0.031	U	0.031	0.10		1
00177	Mirex	2385-85-5	0.088	U	0.088	0.26		1
00177	Toxaphene	8001-35-2	1.0	U	1.0	3.1		1
Pesticides/PCBs	**SW-846 8082**		ug/l		ug/l	ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10	U	0.10	0.52		1
10227	Aroclor 5442	12642-23-8	0.10	U	0.10	0.52		1
10227	Aroclor 5460	11126-42-4	0.10	U	0.10	0.52		1
10227	PCB-1016	12674-11-2	0.10	U	0.10	0.52		1
10227	PCB-1221	11104-28-2	0.10	U	0.10	0.52		1
10227	PCB-1232	11141-16-5	0.21	U	0.21	0.52		1
10227	PCB-1242	53469-21-9	0.10	U	0.10	0.52		1
10227	PCB-1248	12672-29-6	0.10	U	0.10	0.52		1
10227	PCB-1254	11097-69-1	0.10	U	0.10	0.52		1
10227	PCB-1260	11096-82-5	0.10	U	0.10	0.52		1
10227	PCB-1262	37324-23-5	0.21	U	0.21	0.52		1
10227	PCB-1268	11100-14-4	0.17	U	0.17	0.52		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		mg/l		mg/l	mg/l	mg/l	
01743	Aluminum	7429-90-5	0.0834	U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138	U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702	U	0.0702	0.200		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB05-SA5B-121710 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169017
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4502 SDG#: DE045-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
01754	Iron	7439-89-6	0.0522 U	0.0522	0.200		1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500		1
	SW-846 6020		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00038 U	0.00038	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000052 U	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020		1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
	EPA 314.0		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
	SW-846 7199		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **EB05-SA5B-121710 Water**
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169017
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4502 SDG#: DE045-02EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	10354WAM026	01/17/2011 09:23	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354WAI026	01/05/2011 15:21	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	10354WAM026	12/21/2010 08:30	Olivia Arosemena	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	10354WAI026	12/21/2010 01:00	Sherry L Morrow	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	103560021A	12/23/2010 17:34	John W Perkins	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103550011A	12/23/2010 17:42	Lisa A Reinert	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103550011A	01/05/2011 19:39	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	103550012A	12/31/2010 11:34	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	103550012A	12/21/2010 18:10	JoElla L Rice	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	103550011A	12/21/2010 18:10	JoElla L Rice	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	103560021A	12/22/2010 20:30	Elaine F Stoltzfus	1
01743	Aluminum	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
08014	Boron	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
01754	Iron	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
01756	Lithium	SW-846 6010B	1	103551848003	12/23/2010 17:17	John P Hook	1
01757	Magnesium	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
10143	Phosphorus	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
01762	Potassium	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
01767	Sodium	SW-846 6010B	1	103551848003	12/23/2010 17:17	John P Hook	1
08068	Strontium	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
07069	Tin	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
07070	Titanium	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
10144	Zirconium	SW-846 6010B	1	103551848003	12/23/2010 00:27	John W Yanzuk II	1
06024	Antimony	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06026	Barium	SW-846 6020	1	103556050002D	12/23/2010 20:33	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06033	Copper	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06035	Lead	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	103556050002C	12/23/2010 20:33	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	103556050002B	12/23/2010 20:33	Choon Y Tian	1
06042	Silver	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: **EB05-SA5B-121710 Water**
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169017
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4502 SDG#: DE045-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06048	Vanadium	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	103556050002A	12/23/2010 20:33	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	103545713001	12/21/2010 06:33	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	103551848003	12/22/2010 09:26	Denise K Conners	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	103556050002	12/22/2010 08:48	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	103545713001	12/20/2010 13:45	Damary Valentin	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	10355196901A	12/18/2010 16:46	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	10363658701A	12/29/2010 12:29	Ashley M Adams	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	10352196301A	12/18/2010 14:00	Ashley M Adams	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB01-SIV-121710 Water
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169018
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4503 SDG#: DE045-03EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/l		ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1	U	1	5		1
04678	Benzidine	92-87-5	20	U	20	59		1
04678	Benzoic acid	65-85-0	6	U	6	15		1
04678	Benzyl alcohol	100-51-6	5	U	5	15		1
04678	4-Bromophenyl-phenylether	101-55-3	1	U	1	5		1
04678	Carbazole	86-74-8	1	U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1	U	1	5		1
04678	4-Chloroaniline	106-47-8	1	U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1	U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2	U	2	5		1
04678	2-Chlorophenol	95-57-8	1	U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2	U	2	5		1
04678	Dibenzofuran	132-64-9	1	U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1	U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3	U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3	U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	15		1
04678	2,4-Dinitrophenol	51-28-5	10	U	10	30		1
04678	2,4-Dinitrotoluene	121-14-2	1	U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1	U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1	U	1	5		1
04678	Hexachlorobenzene	118-74-1	1	U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1	U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5	U	5	15		1
04678	Hexachloroethane	67-72-1	1	U	1	5		1
04678	Isophorone	78-59-1	1	U	1	5		1
04678	2-Methylphenol	95-48-7	1	U	1	5		1
04678	4-Methylphenol	106-44-5	2	U	2	5		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1	U	1	5		1
04678	3-Nitroaniline	99-09-2	1	U	1	5		1
04678	4-Nitroaniline	100-01-6	1	U	1	5		1
04678	Nitrobenzene	98-95-3	1	U	1	5		1
04678	2-Nitrophenol	88-75-5	1	U	1	5		1
04678	4-Nitrophenol	100-02-7	10	U	10	30		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2	U	2	5		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04678	Pentachlorophenol	87-86-5	3	U	3	15		1
04678	Phenol	108-95-2	1	U	1	5		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB01-SIV-121710 Water
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169018
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4503 SDG#: DE045-03EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l		ug/l	ug/l	ug/l	
04678	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1	U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1	U	1	5		1

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
1,3-dichlorobenzene
1,4-dichlorobenzene

GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l		ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.010	U	0.010	0.052		1
10137	Acenaphthylene	208-96-8	0.010	U	0.010	0.052		1
10137	Anthracene	120-12-7	0.010	U	0.010	0.052		1
10137	Benzo(a)anthracene	56-55-3	0.010	U	0.010	0.052		1
10137	Benzo(a)pyrene	50-32-8	0.010	U	0.010	0.052		1
10137	Benzo(b)fluoranthene	205-99-2	0.010	U	0.010	0.052		1
10137	Benzo(g,h,i)perylene	191-24-2	0.010	U	0.010	0.052		1
10137	Benzo(k)fluoranthene	207-08-9	0.010	U	0.010	0.052		1
10137	Butylbenzylphthalate	85-68-7	0.052	U	0.052	1.0		1
10137	Di-n-butylphthalate	84-74-2	0.23	J	0.052	1.0		1
10137	Chrysene	218-01-9	0.010	U	0.010	0.052		1
10137	Dibenz(a,h)anthracene	53-70-3	0.010	U	0.010	0.052		1
10137	Diethylphthalate	84-66-2	0.054	J	0.052	1.0		1
10137	Dimethylphthalate	131-11-3	0.052	U	0.052	1.0		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.29	J	0.052	1.0		1
10137	Fluoranthene	206-44-0	0.010	U	0.010	0.052		1
10137	Fluorene	86-73-7	0.010	U	0.010	0.052		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.010	U	0.010	0.052		1
10137	1-Methylnaphthalene	90-12-0	0.010	U	0.010	0.052		1
10137	2-Methylnaphthalene	91-57-6	0.010	U	0.010	0.052		1
10137	Naphthalene	91-20-3	0.051	J	0.010	0.052		1
10137	N-Nitrosodimethylamine	62-75-9	0.010	U	0.010	0.052		1
10137	Di-n-octylphthalate	117-84-0	0.052	U	0.052	1.0		1
10137	Phenanthrene	85-01-8	0.010	U	0.010	0.052		1
10137	Pyrene	129-00-0	0.010	U	0.010	0.052		1

The recoveries of several compounds were outside of QC limits in the LCS/LCSD.
The following compounds were detected in the method blank at the respective concentrations of:
di-n-butylphthalate .16 ug/l
bis(2-ethylhexyl)phthalate .19 ug/l
These blank values were not subtracted from the analytical results.
Sufficient sample was unavailable to repeat the analysis.

Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	ug/l	
10407	2,4-D	94-75-7	0.17	U	0.17	0.52		1
10407	Dalapon	75-99-0	0.26	U	0.26	1.3		1
10407	2,4-DB	94-82-6	0.31	U	0.31	1.0		1
10407	Dicamba	1918-00-9	0.083	U	0.083	0.31		1
10407	Dinoseb	88-85-7	0.10	U	0.10	0.52		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB01-SIV-121710 Water
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169018
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4503 SDG#: DE045-03EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	ug/l	
10407	2,4-DP (Dichlorprop)	120-36-5	0.17	U	0.17	0.52		1
10407	MCPA	94-74-6	310	U	310	1,000		1
10407	MCPP	93-65-2	52	U	52	210		1
10407	2,4,5-T	93-76-5	0.016	U	0.016	0.052		1
10407	2,4,5-TP	93-72-1	0.010	U	0.010	0.052		1
Pesticides/PCBs	**SW-846 8081A**		ug/l		ug/l	ug/l	ug/l	
00177	Aldrin	309-00-2	0.0021	U	0.0021	0.010		1
00177	Alpha BHC	319-84-6	0.0031	U	0.0031	0.010		1
00177	Beta BHC	319-85-7	0.0030	U	0.0030	0.010		1
00177	Gamma BHC - Lindane	58-89-9	0.0021	U	0.0021	0.010		1
00177	Chlordane	57-74-9	0.12	U	0.12	0.51		1
00177	p,p-DDD	72-54-8	0.0051	U	0.0051	0.021		1
00177	p,p-DDE	72-55-9	0.0051	U	0.0051	0.021		1
00177	p,p-DDT	50-29-3	0.0051	U	0.0051	0.021		1
00177	Delta BHC	319-86-8	0.0030	U	0.0030	0.010		1
00177	Dieldrin	60-57-1	0.0054	U	0.0054	0.021		1
00177	Endosulfan I	959-98-8	0.0044	U	0.0044	0.010		1
00177	Endosulfan II	33213-65-9	0.015	U	0.015	0.021		1
00177	Endosulfan Sulfate	1031-07-8	0.0059	U	0.0059	0.021		1
00177	Endrin	72-20-8	0.0083	U	0.0083	0.021		1
00177	Endrin Aldehyde	7421-93-4	0.021	U	0.021	0.10		1
00177	Endrin Ketone	53494-70-5	0.0051	U	0.0051	0.021		1
00177	Heptachlor	76-44-8	0.0027	U	0.0027	0.010		1
00177	Heptachlor Epoxide	1024-57-3	0.0024	U	0.0024	0.010		1
00177	Methoxychlor	72-43-5	0.031	U	0.031	0.10		1
00177	Mirex	2385-85-5	0.087	U	0.087	0.26		1
00177	Toxaphene	8001-35-2	1.0	U	1.0	3.1		1
Pesticides/PCBs	**SW-846 8082**		ug/l		ug/l	ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10	U	0.10	0.51		1
10227	Aroclor 5442	12642-23-8	0.10	U	0.10	0.51		1
10227	Aroclor 5460	11126-42-4	0.10	U	0.10	0.51		1
10227	PCB-1016	12674-11-2	0.10	U	0.10	0.51		1
10227	PCB-1221	11104-28-2	0.10	U	0.10	0.51		1
10227	PCB-1232	11141-16-5	0.21	U	0.21	0.51		1
10227	PCB-1242	53469-21-9	0.10	U	0.10	0.51		1
10227	PCB-1248	12672-29-6	0.10	U	0.10	0.51		1
10227	PCB-1254	11097-69-1	0.10	U	0.10	0.51		1
10227	PCB-1260	11096-82-5	0.10	U	0.10	0.51		1
10227	PCB-1262	37324-23-5	0.21	U	0.21	0.51		1
10227	PCB-1268	11100-14-4	0.16	U	0.16	0.51		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		mg/l		mg/l	mg/l	mg/l	
01743	Aluminum	7429-90-5	0.0834	U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138	U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702	U	0.0702	0.200		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB01-SIV-121710 Water
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169018
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4503 SDG#: DE045-03EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		mg/l	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.0522 U	0.0522	0.200		1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500		1
	SW-846 6020		mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00038 U	0.00038	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000052 U	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
	SW-846 7470A		mg/l	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020		1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	mg/l	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
	EPA 314.0		ug/l	ug/l	ug/l	ug/l	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
	SW-846 7199		ug/l	ug/l	ug/l	ug/l	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB01-SIV-121710 Water
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169018
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4503 SDG#: DE045-03EB

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	10354WAM026	01/17/2011 09:48	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10354WAI026	01/05/2011 15:53	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	10354WAM026	12/21/2010 08:30	Olivia Arosemena	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	10354WAI026	12/21/2010 01:00	Sherry L Morrow	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	103560021A	12/23/2010 18:01	John W Perkins	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103550011A	12/23/2010 17:53	Lisa A Reinert	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103550011A	01/05/2011 19:51	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	103550012A	12/31/2010 11:52	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	103550012A	12/21/2010 18:10	JoElla L Rice	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	103550011A	12/21/2010 18:10	JoElla L Rice	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	103560021A	12/22/2010 20:30	Elaine F Stoltzfus	1
01743	Aluminum	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
08014	Boron	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
01754	Iron	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
01756	Lithium	SW-846 6010B	1	103551848003	12/23/2010 17:21	John P Hook	1
01757	Magnesium	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
07058	Manganese	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
10143	Phosphorus	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
01762	Potassium	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
01767	Sodium	SW-846 6010B	1	103551848003	12/23/2010 17:21	John P Hook	1
08068	Strontium	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
07069	Tin	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
07070	Titanium	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
10144	Zirconium	SW-846 6010B	1	103551848003	12/23/2010 00:31	John W Yanzuk II	1
06024	Antimony	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06026	Barium	SW-846 6020	1	103556050002D	12/23/2010 20:36	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06033	Copper	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06035	Lead	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	103556050002C	12/23/2010 20:36	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	103556050002B	12/23/2010 20:36	Choon Y Tian	1
06042	Silver	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **EB01-SIV-121710 Water**
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169018
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4503 SDG#: DE045-03EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06048	Vanadium	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	103556050002A	12/23/2010 20:36	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	103545713001	12/21/2010 06:35	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	103551848003	12/22/2010 09:26	Denise K Conners	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	103556050002	12/22/2010 08:48	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	103545713001	12/20/2010 13:45	Damary Valentin	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	10355196901A	12/21/2010 09:10	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	10363658701A	12/29/2010 12:53	Ashley M Adams	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	10352196301A	12/18/2010 14:13	Ashley M Adams	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169019
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4504 SDG#: DE045-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U	200	590		1
04688	Benzidine	92-87-5	1,400	U	1,400	3,900		1
04688	Benzoic acid	65-85-0	200	U	200	590		1
04688	Benzyl alcohol	100-51-6	200	U	200	590		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200		1
04688	Carbazole	86-74-8	20	U	20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	200		1
04688	4-Chloroaniline	106-47-8	78	U	78	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200		1
04688	2-Chlorophenol	95-57-8	20	U	20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	200		1
04688	Dibenzofuran	132-64-9	20	U	20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390		1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200		1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	200		1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	590		1
04688	2,4-Dinitrophenol	51-28-5	780	U	780	2,400		1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200		1
04688	Hexachlorobenzene	118-74-1	20	U	20	200		1
04688	Hexachlorobutadiene	87-68-3	78	U	78	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	590		1
04688	Hexachloroethane	67-72-1	20	U	20	200		1
04688	Isophorone	78-59-1	20	U	20	200		1
04688	2-Methylphenol	95-48-7	39	U	39	200		1
04688	4-Methylphenol	106-44-5	39	U	39	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	20	U	20	200		1
04688	3-Nitroaniline	99-09-2	39	U	39	200		1
04688	4-Nitroaniline	100-01-6	78	U	78	200		1
04688	Nitrobenzene	98-95-3	20	U	20	200		1
04688	2-Nitrophenol	88-75-5	20	U	20	200		1
04688	4-Nitrophenol	100-02-7	200	U	200	590		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	200	U	200	590		1
04688	Phenol	108-95-2	20	U	20	200		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169019
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4504 SDG#: DE045-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	200		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	200		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.78	U	0.78	2.0		1
10138	Acenaphthylene	208-96-8	0.39	U	0.39	2.0		1
10138	Anthracene	120-12-7	0.39	U	0.39	2.0		1
10138	Benzo(a)anthracene	56-55-3	1.2	J	0.78	2.0		1
10138	Benzo(a)pyrene	50-32-8	1.2	J	0.78	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	3.0		0.78	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	1.0	J	0.78	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	1.1	J	0.78	2.0		1
10138	Butylbenzylphthalate	85-68-7	11	J	7.1	21		1
10138	Di-n-butylphthalate	84-74-2	7.1	U	7.1	21		1
10138	Chrysene	218-01-9	1.9	J	0.39	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.78	U	0.78	2.0		1
10138	Diethylphthalate	84-66-2	7.1	U	7.1	21		1
10138	Dimethylphthalate	131-11-3	7.1	U	7.1	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	18	J	7.1	21		1
10138	Fluoranthene	206-44-0	2.7		0.78	2.0		1
10138	Fluorene	86-73-7	1.9	J	0.78	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.91	J	0.78	2.0		1
10138	1-Methylnaphthalene	90-12-0	0.78	U	0.78	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.78	U	0.78	2.0		1
10138	Naphthalene	91-20-3	0.98	J	0.78	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.78	U	0.78	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.1	U	7.1	21		1
10138	Phenanthrene	85-01-8	1.4	J	0.78	2.0		1
10138	Pyrene	129-00-0	2.2		0.78	2.0		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.2		1
10401	Dalapon	75-99-0	5.2	U	5.2	11		1
10401	2,4-DB	94-82-6	7.5	U	7.5	7.5		1
10401	Dicamba	1918-00-9	0.47	U	0.47	1.4		1
10401	Dinoseb	88-85-7	0.94	U	0.94	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.94	U	0.94	2.0		1
10401	MCPA	94-74-6	580	U	580	580		1
10401	MCPP (Mecoprop)	93-65-2	88	U	88	290		1
10401	2,4,5-T	93-76-5	0.096	U	0.096	0.20		1
10401	2,4,5-TP	93-72-1	0.088	U	0.088	0.20		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169019
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4504 SDG#: DE045-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
attained.								
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.078	U	0.078	0.20		1
01363	Alpha BHC	319-84-6	0.040	U	0.040	0.20		1
01363	Beta BHC	319-85-7	0.071	U	0.071	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.040	U	0.040	0.20		1
01363	Chlordane	57-74-9	0.94	U	0.94	4.0		1
01363	p,p-DDD	72-54-8	0.48	U	0.48	0.48		1
01363	p,p-DDE	72-55-9	0.73	U	0.73	0.73		1
01363	p,p-DDT	50-29-3	0.92	U	0.92	0.92		1
01363	Delta BHC	319-86-8	0.11	J	0.042	0.20		1
01363	Dieldrin	60-57-1	0.078	U	0.078	0.40		1
01363	Endosulfan I	959-98-8	0.052	U	0.052	0.20		1
01363	Endosulfan II	33213-65-9	0.18	U	0.18	0.40		1
01363	Endosulfan Sulfate	1031-07-8	0.078	U	0.078	0.40		1
01363	Endrin	72-20-8	0.078	U	0.078	0.40		1
01363	Endrin Aldehyde	7421-93-4	0.17	U	0.17	0.40		1
01363	Endrin Ketone	53494-70-5	0.078	U	0.078	0.40		1
01363	Heptachlor	76-44-8	0.071	U	0.071	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.11	U	0.11	0.20		1
01363	Methoxychlor	72-43-5	0.40	U	0.40	2.0		1
01363	Mirex	2385-85-5	0.24	U	0.24	0.40		1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.8		1
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.								
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.9		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.9		1
10225	Aroclor 5460	11126-42-4	4.8		1.2	3.9		1
10225	PCB-1016	12674-11-2	0.39	U	0.39	2.0		1
10225	PCB-1221	11104-28-2	0.59	U	0.59	2.0		1
10225	PCB-1232	11141-16-5	0.61	U	0.61	2.0		1
10225	PCB-1242	53469-21-9	0.59	U	0.59	2.0		1
10225	PCB-1248	12672-29-6	0.39	U	0.39	2.0		1
10225	PCB-1254	11097-69-1	4.4		0.39	2.0		1
10225	PCB-1260	11096-82-5	1.9	J	0.39	2.0		1
10225	PCB-1262	37324-23-5	0.39	U	0.39	2.0		1
10225	PCB-1268	11100-14-4	0.39	U	0.39	2.0		1
Metals	**SW-846 6010B**		mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	11,900		5.86	23.3		1
07914	Boron	7440-42-8	8.15		1.04	5.82		1
01650	Calcium	7440-70-2	6,160		7.14	23.3		1
01654	Iron	7439-89-6	18,700		5.49	23.3		1
01656	Lithium	7439-93-2	21.1		0.26	2.3		1
01657	Magnesium	7439-95-4	5,030		2.96	11.6		1
06958	Manganese	7439-96-5	274		0.0909	0.582		1
10145	Phosphorus	7723-14-0	441		0.652	11.6		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169019
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4504 SDG#: DE045-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01662	Potassium	7440-09-7	3,040		21.0	58.2		1
01667	Sodium	7440-23-5	101	J	43.4	116		1
07968	Strontium	7440-24-6	26.6		0.0722	0.582		1
06969	Tin	7440-31-5	2.99	J	1.16	11.6		1
06970	Titanium	7440-32-6	1,070		0.443	1.16		1
10146	Zirconium	7440-67-7	2.40	J	0.978	5.82		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.101	J	0.0692	0.231		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.93		0.0692	0.461		2
06126	Barium	7440-39-3	117		0.125	0.461		2
06127	Beryllium	7440-41-7	0.591		0.0185	0.115		2
06128	Cadmium	7440-43-9	0.279		0.0415	0.115		2
06131	Chromium	7440-47-3	22.9		0.138	0.461		2
06132	Cobalt	7440-48-4	8.83		0.0231	0.115		2
06133	Copper	7440-50-8	10.8		0.0761	0.461		2
06135	Lead	7439-92-1	12.2		0.0120	0.231		2
06138	Molybdenum	7439-98-7	1.09		0.0577	0.115		2
06139	Nickel	7440-02-0	14.4		0.115	0.461		2
06141	Selenium	7782-49-2	0.239	J	0.0461	0.461		2
06142	Silver	7440-22-4	0.0350	J	0.0138	0.115		2
06145	Thallium	7440-28-0	0.307		0.0346	0.115		2
06148	Vanadium	7440-62-2	47.2		0.0254	0.115		2
06149	Zinc	7440-66-6	84.4		0.646	3.46		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0209	J	0.0032	0.111		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.1	J	0.94	1.2		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.6	U	10.6	35.3		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.32	J	0.24	1.2		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	515		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169019
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4504 SDG#: DE045-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.56	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	15.0	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011	12:38	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011	01:13	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010	06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010	08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620013A	01/01/2011	05:46	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/08/2011	02:35	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011	02:37	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610029A	12/28/2010	07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010	06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620013A	12/29/2010	00:45	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010	17:55	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010	17:55	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010	17:55	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010	17:55	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010	17:55	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010	17:55	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010	17:55	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010	17:55	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010	17:55	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010	17:55	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010	17:55	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169019
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4504 SDG#: DE045-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 17:55	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:22	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:22	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:22	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:22	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:30	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 17:27	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 15:27	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 12:46	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169020
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4505 SDG#: DE045-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	530		1
04688	Benzidine	92-87-5	1,200	U	1,200	3,500		1
04688	Benzoic acid	65-85-0	180	U	180	530		1
04688	Benzyl alcohol	100-51-6	180	U	180	530		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	35	U	35	180		1
04688	4-Chloroaniline	106-47-8	71	U	71	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	35	U	35	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	35	U	35	180		1
04688	3,5-Dimethylphenol	108-68-9	35	U	35	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530		1
04688	2,4-Dinitrophenol	51-28-5	710	U	710	2,100		1
04688	2,4-Dinitrotoluene	121-14-2	35	U	35	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	71	U	71	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	530		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	35	U	35	180		1
04688	4-Methylphenol	106-44-5	35	U	35	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	35	U	35	180		1
04688	4-Nitroaniline	100-01-6	71	U	71	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	530		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	530		1
04688	Phenol	108-95-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169020
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4505 SDG#: DE045-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	35	U	35	180		1
04688	2,4,6-Trichlorophenol	88-06-2	35	U	35	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.71	U	0.71	1.8		1
10138	Acenaphthylene	208-96-8	0.35	U	0.35	1.8		1
10138	Anthracene	120-12-7	0.35	U	0.35	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.95	J	0.71	1.8		1
10138	Benzo(a)pyrene	50-32-8	1.0	J	0.71	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	2.2		0.71	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.82	J	0.71	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.89	J	0.71	1.8		1
10138	Butylbenzylphthalate	85-68-7	12	J	6.4	19		1
10138	Di-n-butylphthalate	84-74-2	6.4	U	6.4	19		1
10138	Chrysene	218-01-9	1.5	J	0.35	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.71	U	0.71	1.8		1
10138	Diethylphthalate	84-66-2	6.4	U	6.4	19		1
10138	Dimethylphthalate	131-11-3	6.4	U	6.4	19		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	13	J	6.4	19		1
10138	Fluoranthene	206-44-0	2.0		0.71	1.8		1
10138	Fluorene	86-73-7	11		0.71	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	U	0.71	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.71	U	0.71	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.71	U	0.71	1.8		1
10138	Naphthalene	91-20-3	0.71	U	0.71	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.71	U	0.71	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.4	U	6.4	19		1
10138	Phenanthrene	85-01-8	1.3	J	0.71	1.8		1
10138	Pyrene	129-00-0	1.8		0.71	1.8		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	3.8		1
10401	Dalapon	75-99-0	4.7	U	4.7	9.6		1
10401	2,4-DB	94-82-6	6.9	U	6.9	6.9		1
10401	Dicamba	1918-00-9	0.77	J	0.42	1.3		1
10401	Dinoseb	88-85-7	0.85	U	0.85	2.5		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.85	U	0.85	1.8		1
10401	MCPA	94-74-6	81	U	81	270		1
10401	MCPP (Mecoprop)	93-65-2	240	J	80	270		1
10401	2,4,5-T	93-76-5	0.087	U	0.087	0.18		1
10401	2,4,5-TP	93-72-1	0.080	U	0.080	0.18		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169020
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4505 SDG#: DE045-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
attained.								
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.070	U	0.070	0.18		1
01363	Alpha BHC	319-84-6	0.036	U	0.036	0.18		1
01363	Beta BHC	319-85-7	0.064	U	0.064	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.036	U	0.036	0.18		1
01363	Chlordane	57-74-9	0.85	U	0.85	3.6		1
01363	p,p-DDD	72-54-8	0.35	J	0.070	0.36		1
01363	p,p-DDE	72-55-9	1.0		0.070	0.36		1
01363	p,p-DDT	50-29-3	1.4		0.070	0.36		1
01363	Delta BHC	319-86-8	0.038	U	0.038	0.18		1
01363	Dieldrin	60-57-1	0.12	J	0.070	0.36		1
01363	Endosulfan I	959-98-8	0.047	U	0.047	0.18		1
01363	Endosulfan II	33213-65-9	0.11	U	0.11	0.36		1
01363	Endosulfan Sulfate	1031-07-8	0.070	U	0.070	0.36		1
01363	Endrin	72-20-8	0.070	U	0.070	0.36		1
01363	Endrin Aldehyde	7421-93-4	0.40		0.070	0.36		1
01363	Endrin Ketone	53494-70-5	0.070	U	0.070	0.36		1
01363	Heptachlor	76-44-8	0.064	U	0.064	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.036	U	0.036	0.18		1
01363	Methoxychlor	72-43-5	0.36	U	0.36	1.8		1
01363	Mirex	2385-85-5	0.070	U	0.070	0.36		1
01363	Toxaphene	8001-35-2	2.3	U	2.3	7.0		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.5		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.5		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.5		1
10225	PCB-1016	12674-11-2	0.35	U	0.35	1.8		1
10225	PCB-1221	11104-28-2	0.53	U	0.53	1.8		1
10225	PCB-1232	11141-16-5	0.55	U	0.55	1.8		1
10225	PCB-1242	53469-21-9	0.53	U	0.53	1.8		1
10225	PCB-1248	12672-29-6	0.35	U	0.35	1.8		1
10225	PCB-1254	11097-69-1	0.47	U	0.47	1.8		1
10225	PCB-1260	11096-82-5	1.1	U	1.1	1.8		1
10225	PCB-1262	37324-23-5	0.35	U	0.35	1.8		1
10225	PCB-1268	11100-14-4	0.35	U	0.35	1.8		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	7,920		5.34	21.2		1
07914	Boron	7440-42-8	6.39		0.945	5.31		1
01650	Calcium	7440-70-2	3,220		6.51	21.2		1
01654	Iron	7439-89-6	14,400		5.00	21.2		1
01656	Lithium	7439-93-2	17.6		0.23	2.1		1
01657	Magnesium	7439-95-4	3,640		2.70	10.6		1
06958	Manganese	7439-96-5	209		0.0828	0.531		1
10145	Phosphorus	7723-14-0	327		0.594	10.6		1
01662	Potassium	7440-09-7	2,450		19.1	53.1		1
01667	Sodium	7440-23-5	78.1	J	39.6	106		1
07968	Strontium	7440-24-6	10.3		0.0658	0.531		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169020
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4505 SDG#: DE045-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06969	Tin	7440-31-5	2.05	J	1.06	10.6		1
06970	Titanium	7440-32-6	786		0.403	1.06		1
10146	Zirconium	7440-67-7	1.57	J	0.892	5.31		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.100	J	0.0607	0.202		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.73		0.0607	0.404		2
06126	Barium	7440-39-3	65.3		0.109	0.404		2
06127	Beryllium	7440-41-7	0.405		0.0162	0.101		2
06128	Cadmium	7440-43-9	0.157		0.0364	0.101		2
06131	Chromium	7440-47-3	15.3		0.121	0.404		2
06132	Cobalt	7440-48-4	4.48		0.0202	0.101		2
06133	Copper	7440-50-8	7.46		0.0667	0.404		2
06135	Lead	7439-92-1	9.90		0.0105	0.202		2
06138	Molybdenum	7439-98-7	0.478		0.0506	0.101		2
06139	Nickel	7440-02-0	9.76		0.101	0.404		2
06141	Selenium	7782-49-2	0.172	J	0.0404	0.404		2
06142	Silver	7440-22-4	0.0246	J	0.0121	0.101		2
06145	Thallium	7440-28-0	0.216		0.0303	0.101		2
06148	Vanadium	7440-62-2	32.1		0.0222	0.101		2
06149	Zinc	7440-66-6	64.1		0.566	3.03		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0078	J	0.0029	0.101		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.7		0.85	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.6	U	9.6	31.8		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.56	J	0.21	1.1		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	477		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified	**Std. Units**			**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.64		0.0100	0.0100		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169020
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4505 SDG#: DE045-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011	13:13	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011	01:45	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010	06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010	08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620013A	01/01/2011	07:08	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/08/2011	02:49	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011	02:55	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610029A	12/28/2010	07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010	06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620013A	12/29/2010	00:45	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010	17:59	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011	10:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011	10:31	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169020
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4505 SDG#: DE045-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:31	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 18:23	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 17:52	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 13:18	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169021
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4506 SDG#: DE045-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U	210	620		1
04688	Benzidine	92-87-5	1,500	U	1,500	4,200		1
04688	Benzoic acid	65-85-0	210	U	210	620		1
04688	Benzyl alcohol	100-51-6	210	U	210	620		1
04688	4-Bromophenyl-phenylether	101-55-3	21	U	21	210		1
04688	Carbazole	86-74-8	21	U	21	210		1
04688	4-Chloro-3-methylphenol	59-50-7	42	U	42	210		1
04688	4-Chloroaniline	106-47-8	83	U	83	210		1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U	21	210		1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U	21	210		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U	21	210		1
04688	2-Chloronaphthalene	91-58-7	21	U	21	210		1
04688	2-Chlorophenol	95-57-8	21	U	21	210		1
04688	4-Chlorophenyl-phenylether	7005-72-3	42	U	42	210		1
04688	Dibenzofuran	132-64-9	21	U	21	210		1
04688	1,2-Dichlorobenzene	95-50-1	21	U	21	210		1
04688	1,3-Dichlorobenzene	541-73-1	21	U	21	210		1
04688	1,4-Dichlorobenzene	106-46-7	21	U	21	210		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	420		1
04688	2,4-Dichlorophenol	120-83-2	21	U	21	210		1
04688	2,4-Dimethylphenol	105-67-9	42	U	42	210		1
04688	3,5-Dimethylphenol	108-68-9	42	U	42	210		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U	210	620		1
04688	2,4-Dinitrophenol	51-28-5	830	U	830	2,500		1
04688	2,4-Dinitrotoluene	121-14-2	42	U	42	210		1
04688	2,6-Dinitrotoluene	606-20-2	21	U	21	210		1
04688	1,2-Diphenylhydrazine	122-66-7	21	U	21	210		1
04688	Hexachlorobenzene	118-74-1	21	U	21	210		1
04688	Hexachlorobutadiene	87-68-3	83	U	83	210		1
04688	Hexachlorocyclopentadiene	77-47-4	210	U	210	620		1
04688	Hexachloroethane	67-72-1	21	U	21	210		1
04688	Isophorone	78-59-1	21	U	21	210		1
04688	2-Methylphenol	95-48-7	42	U	42	210		1
04688	4-Methylphenol	106-44-5	42	U	42	210		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	21	U	21	210		1
04688	3-Nitroaniline	99-09-2	42	U	42	210		1
04688	4-Nitroaniline	100-01-6	83	U	83	210		1
04688	Nitrobenzene	98-95-3	21	U	21	210		1
04688	2-Nitrophenol	88-75-5	21	U	21	210		1
04688	4-Nitrophenol	100-02-7	210	U	210	620		1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U	21	210		1
04688	N-Nitrosodiphenylamine	86-30-6	21	U	21	210		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	210	U	210	620		1
04688	Phenol	108-95-2	21	U	21	210		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169021
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4506 SDG#: DE045-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	21	U	21	210		1
04688	2,4,5-Trichlorophenol	95-95-4	42	U	42	210		1
04688	2,4,6-Trichlorophenol	88-06-2	42	U	42	210		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.83	U	0.83	2.1		1
10138	Acenaphthylene	208-96-8	0.55	J	0.42	2.1		1
10138	Anthracene	120-12-7	0.83	J	0.42	2.1		1
10138	Benzo(a)anthracene	56-55-3	1.5	J	0.83	2.1		1
10138	Benzo(a)pyrene	50-32-8	1.7	J	0.83	2.1		1
10138	Benzo(b)fluoranthene	205-99-2	5.4		0.83	2.1		1
10138	Benzo(g,h,i)perylene	191-24-2	1.2	J	0.83	2.1		1
10138	Benzo(k)fluoranthene	207-08-9	1.7	J	0.83	2.1		1
10138	Butylbenzylphthalate	85-68-7	13	J	7.5	22		1
10138	Di-n-butylphthalate	84-74-2	7.5	U	7.5	22		1
10138	Chrysene	218-01-9	6.9		0.42	2.1		1
10138	Dibenz(a,h)anthracene	53-70-3	0.83	U	0.83	2.1		1
10138	Diethylphthalate	84-66-2	7.5	U	7.5	22		1
10138	Dimethylphthalate	131-11-3	7.5	U	7.5	22		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	54		7.5	22		1
10138	Fluoranthene	206-44-0	16		0.83	2.1		1
10138	Fluorene	86-73-7	0.83	U	0.83	2.1		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.0	J	0.83	2.1		1
10138	1-Methylnaphthalene	90-12-0	0.83	U	0.83	2.1		1
10138	2-Methylnaphthalene	91-57-6	0.83	U	0.83	2.1		1
10138	Naphthalene	91-20-3	0.83	U	0.83	2.1		1
10138	N-Nitrosodimethylamine	62-75-9	0.83	U	0.83	2.1		1
10138	Di-n-octylphthalate	117-84-0	7.5	U	7.5	22		1
10138	Phenanthrene	85-01-8	14		0.83	2.1		1
10138	Pyrene	129-00-0	11		0.83	2.1		1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.5	U	1.5	4.5		1
10401	Dalapon	75-99-0	5.5	U	5.5	11		1
10401	2,4-DB	94-82-6	0.77	U	0.77	2.1		1
10401	Dicamba	1918-00-9	0.78	J	0.50	1.5		1
10401	Dinoseb	88-85-7	1.0	U	1.0	3.0		1
10401	2,4-DP (Dichlorprop)	120-36-5	2.0	J	1.0	2.1		1
10401	MCPA	94-74-6	390		95	310		1
10401	MCPP (Mecoprop)	93-65-2	360		94	310		1
10401	2,4,5-T	93-76-5	0.10	U	0.10	0.21		1
10401	2,4,5-TP	93-72-1	0.094	U	0.094	0.21		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.082	U	0.082	0.21		1
01363	Alpha BHC	319-84-6	0.080	U	0.080	0.21		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169021
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4506 SDG#: DE045-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Beta BHC	319-85-7	0.075	U	0.075	0.21		1
01363	Gamma BHC - Lindane	58-89-9	0.042	U	0.042	0.21		1
01363	Chlordane	57-74-9	4.1	U	4.1	4.2		1
01363	p,p-DDD	72-54-8	1.3	U	1.3	1.3		1
01363	p,p-DDE	72-55-9	1.0	U	1.0	1.0		1
01363	p,p-DDT	50-29-3	1.2	U	1.2	1.2		1
01363	Delta BHC	319-86-8	0.14	J	0.045	0.21		1
01363	Dieldrin	60-57-1	0.50	U	0.50	0.50		1
01363	Endosulfan I	959-98-8	0.43	U	0.43	0.43		1
01363	Endosulfan II	33213-65-9	0.31	U	0.31	0.42		1
01363	Endosulfan Sulfate	1031-07-8	0.11	U	0.11	0.42		1
01363	Endrin	72-20-8	0.082	U	0.082	0.42		1
01363	Endrin Aldehyde	7421-93-4	0.082	U	0.082	0.42		1
01363	Endrin Ketone	53494-70-5	0.36	U	0.36	0.42		1
01363	Heptachlor	76-44-8	0.075	U	0.075	0.21		1
01363	Heptachlor Epoxide	1024-57-3	0.072	U	0.072	0.21		1
01363	Methoxychlor	72-43-5	0.42	U	0.42	2.1		1
01363	Mirex	2385-85-5	0.082	U	0.082	0.42		1
01363	Toxaphene	8001-35-2	2.7	U	2.7	8.2		1

Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	4.1		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	4.1		1
10225	Aroclor 5460	11126-42-4	7.6		1.2	4.1		1
10225	PCB-1016	12674-11-2	0.41	U	0.41	2.1		1
10225	PCB-1221	11104-28-2	0.62	U	0.62	2.1		1
10225	PCB-1232	11141-16-5	0.65	U	0.65	2.1		1
10225	PCB-1242	53469-21-9	0.62	U	0.62	2.1		1
10225	PCB-1248	12672-29-6	0.41	U	0.41	2.1		1
10225	PCB-1254	11097-69-1	4.8		0.41	2.1		1
10225	PCB-1260	11096-82-5	4.9		0.41	2.1		1
10225	PCB-1262	37324-23-5	0.41	U	0.41	2.1		1
10225	PCB-1268	11100-14-4	0.41	U	0.41	2.1		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,200		6.04	24.0		1
07914	Boron	7440-42-8	11.3		1.07	6.00		1
01650	Calcium	7440-70-2	4,880		7.36	24.0		1
01654	Iron	7439-89-6	30,300		5.65	24.0		1
01656	Lithium	7439-93-2	26.5		0.26	2.4		1
01657	Magnesium	7439-95-4	6,430		3.05	12.0		1
06958	Manganese	7439-96-5	454		0.0936	0.600		1
10145	Phosphorus	7723-14-0	526		0.672	12.0		1
01662	Potassium	7440-09-7	5,400		21.6	60.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169021
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4506 SDG#: DE045-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01667	Sodium	7440-23-5	113	J	44.8	120		1
07968	Strontium	7440-24-6	32.8		0.0744	0.600		1
06969	Tin	7440-31-5	2.79	J	1.20	12.0		1
06970	Titanium	7440-32-6	1,460		0.456	1.20		1
10146	Zirconium	7440-67-7	6.11		1.01	6.00		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.174	J	0.0734	0.245		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.45		0.0734	0.490		2
06126	Barium	7440-39-3	184		0.132	0.490		2
06127	Beryllium	7440-41-7	0.991		0.0196	0.122		2
06128	Cadmium	7440-43-9	0.752		0.0441	0.122		2
06131	Chromium	7440-47-3	38.0		0.147	0.490		2
06132	Cobalt	7440-48-4	10.3		0.0245	0.122		2
06133	Copper	7440-50-8	17.7		0.0808	0.490		2
06135	Lead	7439-92-1	31.1		0.0127	0.245		2
06138	Molybdenum	7439-98-7	0.893		0.0612	0.122		2
06139	Nickel	7440-02-0	21.8		0.122	0.490		2
06141	Selenium	7782-49-2	0.193	J	0.0490	0.490		2
06142	Silver	7440-22-4	0.0845	J	0.0147	0.122		2
06145	Thallium	7440-28-0	0.449		0.0367	0.122		2
06148	Vanadium	7440-62-2	68.9		0.0269	0.122		2
06149	Zinc	7440-66-6	186		0.685	3.67		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0233	J	0.0034	0.120		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.0	U	1.0	1.2		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.2	U	11.2	37.5		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.35	J	0.25	1.2		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	599		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.29		0.0100	0.0100		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169021
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4506 SDG#: DE045-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	19.9	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011	13:49	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011	02:17	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010	06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010	08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620013A	01/01/2011	07:36	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/08/2011	03:03	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011	03:14	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610029A	12/28/2010	07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010	06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620013A	12/29/2010	00:45	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010	18:02	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011	10:35	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011	10:35	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169021
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4506 SDG#: DE045-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:35	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:35	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:35	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:35	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:32	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 18:38	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 18:15	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 13:34	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169022
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4507 SDG#: DE045-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	76	U	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	760	U	760	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	76	U	76	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169022
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4507 SDG#: DE045-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.63	J	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	1.3	J	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.96	J	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	3.4		0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.77	J	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	1.3	J	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	7.1	J	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	6.8	U	6.8	20		1
10138	Chrysene	218-01-9	5.8		0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.8	U	6.8	20		1
10138	Dimethylphthalate	131-11-3	6.8	U	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	41		6.8	20		1
10138	Fluoranthene	206-44-0	4.1		0.76	1.9		1
10138	Fluorene	86-73-7	3.0		0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	1.8	J	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	2.1		0.76	1.9		1
10138	Naphthalene	91-20-3	3.8		0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.8	U	6.8	20		1
10138	Phenanthrene	85-01-8	6.8		0.76	1.9		1
10138	Pyrene	129-00-0	2.8		0.76	1.9		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1		1
10401	Dalapon	75-99-0	5.0	U	5.0	10		1
10401	2,4-DB	94-82-6	1.7	U	1.7	1.9		1
10401	Dicamba	1918-00-9	1.9		0.46	1.4		1
10401	Dinoseb	88-85-7	0.91	U	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.91	U	0.91	1.9		1
10401	MCPA	94-74-6	490	U	490	490		1
10401	MCPP (Mecoprop)	93-65-2	85	U	85	280		1
10401	2,4,5-T	93-76-5	0.093	U	0.093	0.19		1
10401	2,4,5-TP	93-72-1	0.085	U	0.085	0.19		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169022
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4507 SDG#: DE045-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
attained.								
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.075	U	0.075	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.068	U	0.068	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	0.91	U	0.91	3.9		1
01363	p,p-DDD	72-54-8	0.38	U	0.38	1.9		5
01363	p,p-DDE	72-55-9	2.6	U	2.6	2.6		1
01363	p,p-DDT	50-29-3	7.8		0.38	1.9		5
01363	Delta BHC	319-86-8	0.074	J	0.041	0.19		1
01363	Dieldrin	60-57-1	0.47	U	0.47	0.47		1
01363	Endosulfan I	959-98-8	0.050	U	0.050	0.19		1
01363	Endosulfan II	33213-65-9	2.1	U	2.1	2.1		1
01363	Endosulfan Sulfate	1031-07-8	0.075	U	0.075	0.39		1
01363	Endrin	72-20-8	0.075	U	0.075	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.89	U	0.89	0.89		1
01363	Endrin Ketone	53494-70-5	0.075	U	0.075	0.39		1
01363	Heptachlor	76-44-8	0.068	U	0.068	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.45	U	0.45	0.45		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.075	U	0.075	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.5		1
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.								
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	2.3	U	2.3	7.5		2
10225	Aroclor 5442	12642-23-8	2.3	U	2.3	7.5		2
10225	Aroclor 5460	11126-42-4	8.2		2.3	7.5		2
10225	PCB-1016	12674-11-2	0.75	U	0.75	3.9		2
10225	PCB-1221	11104-28-2	1.1	U	1.1	3.9		2
10225	PCB-1232	11141-16-5	1.2	U	1.2	3.9		2
10225	PCB-1242	53469-21-9	1.1	U	1.1	3.9		2
10225	PCB-1248	12672-29-6	0.75	U	0.75	3.9		2
10225	PCB-1254	11097-69-1	43		0.75	3.9		2
10225	PCB-1260	11096-82-5	18		0.75	3.9		2
10225	PCB-1262	37324-23-5	0.75	U	0.75	3.9		2
10225	PCB-1268	11100-14-4	0.75	U	0.75	3.9		2
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.								
Metals	**SW-846 6010B**		mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	17,400		5.61	22.3		1
07914	Boron	7440-42-8	8.79		0.993	5.58		1
01650	Calcium	7440-70-2	5,250		6.84	22.3		1
01654	Iron	7439-89-6	20,400		5.25	22.3		1
01656	Lithium	7439-93-2	23.8		0.25	2.2		1
01657	Magnesium	7439-95-4	4,420		2.83	11.2		1
06958	Manganese	7439-96-5	440		0.0870	0.558		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169022
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4507 SDG#: DE045-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10145	Phosphorus	7723-14-0	423		0.625	11.2		1
01662	Potassium	7440-09-7	4,070		20.1	55.8		1
01667	Sodium	7440-23-5	110	J	41.6	112		1
07968	Strontium	7440-24-6	27.2		0.0692	0.558		1
06969	Tin	7440-31-5	2.27	J	1.12	11.2		1
06970	Titanium	7440-32-6	1,160		0.424	1.12		1
10146	Zirconium	7440-67-7	4.21	J	0.937	5.58		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.118	J	0.0663	0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.32		0.0663	0.442		2
06126	Barium	7440-39-3	138		0.119	0.442		2
06127	Beryllium	7440-41-7	0.730		0.0177	0.110		2
06128	Cadmium	7440-43-9	0.457		0.0398	0.110		2
06131	Chromium	7440-47-3	26.7		0.133	0.442		2
06132	Cobalt	7440-48-4	7.38		0.0221	0.110		2
06133	Copper	7440-50-8	13.2		0.0729	0.442		2
06135	Lead	7439-92-1	15.3		0.0115	0.221		2
06138	Molybdenum	7439-98-7	1.05		0.0552	0.110		2
06139	Nickel	7440-02-0	16.0		0.110	0.442		2
06141	Selenium	7782-49-2	0.230	J	0.0442	0.442		2
06142	Silver	7440-22-4	0.0983	J	0.0133	0.110		2
06145	Thallium	7440-28-0	0.335		0.0331	0.110		2
06148	Vanadium	7440-62-2	48.4		0.0243	0.110		2
06149	Zinc	7440-66-6	88.8		0.619	3.31		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.927		0.0080	0.280		2.5
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.2		0.91	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2	U	10.2	34.1		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23	U	0.23	1.1		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	509		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169022
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4507 SDG#: DE045-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.16	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	12.1	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011	14:24	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011	02:49	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010	06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010	08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620013A	01/01/2011	08:03	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/08/2011	03:17	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/14/2011	21:30	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011	03:33	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610029A	12/28/2010	07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010	06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620013A	12/29/2010	00:45	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010	18:05	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010	18:05	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010	18:05	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010	18:05	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010	18:05	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010	18:05	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010	18:05	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010	18:05	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010	18:05	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010	18:05	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010	18:05	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169022
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4507 SDG#: DE045-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:05	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:38	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:38	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:38	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:38	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 18:17	Nelli S Markaryan	2.5
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 18:52	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 18:38	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 13:42	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169023
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4508 SDG#: DE045-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U	210	620		1
04688	Benzidine	92-87-5	1,400	U	1,400	4,100		1
04688	Benzoic acid	65-85-0	210	U	210	620		1
04688	Benzyl alcohol	100-51-6	210	U	210	620		1
04688	4-Bromophenyl-phenylether	101-55-3	21	U	21	210		1
04688	Carbazole	86-74-8	21	U	21	210		1
04688	4-Chloro-3-methylphenol	59-50-7	41	U	41	210		1
04688	4-Chloroaniline	106-47-8	83	U	83	210		1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U	21	210		1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U	21	210		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U	21	210		1
04688	2-Chloronaphthalene	91-58-7	21	U	21	210		1
04688	2-Chlorophenol	95-57-8	21	U	21	210		1
04688	4-Chlorophenyl-phenylether	7005-72-3	41	U	41	210		1
04688	Dibenzofuran	132-64-9	21	U	21	210		1
04688	1,2-Dichlorobenzene	95-50-1	21	U	21	210		1
04688	1,3-Dichlorobenzene	541-73-1	21	U	21	210		1
04688	1,4-Dichlorobenzene	106-46-7	21	U	21	210		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	410		1
04688	2,4-Dichlorophenol	120-83-2	21	U	21	210		1
04688	2,4-Dimethylphenol	105-67-9	41	U	41	210		1
04688	3,5-Dimethylphenol	108-68-9	41	U	41	210		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U	210	620		1
04688	2,4-Dinitrophenol	51-28-5	830	U	830	2,500		1
04688	2,4-Dinitrotoluene	121-14-2	41	U	41	210		1
04688	2,6-Dinitrotoluene	606-20-2	21	U	21	210		1
04688	1,2-Diphenylhydrazine	122-66-7	21	U	21	210		1
04688	Hexachlorobenzene	118-74-1	21	U	21	210		1
04688	Hexachlorobutadiene	87-68-3	83	U	83	210		1
04688	Hexachlorocyclopentadiene	77-47-4	210	U	210	620		1
04688	Hexachloroethane	67-72-1	21	U	21	210		1
04688	Isophorone	78-59-1	21	U	21	210		1
04688	2-Methylphenol	95-48-7	41	U	41	210		1
04688	4-Methylphenol	106-44-5	41	U	41	210		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	21	U	21	210		1
04688	3-Nitroaniline	99-09-2	41	U	41	210		1
04688	4-Nitroaniline	100-01-6	83	U	83	210		1
04688	Nitrobenzene	98-95-3	21	U	21	210		1
04688	2-Nitrophenol	88-75-5	21	U	21	210		1
04688	4-Nitrophenol	100-02-7	210	U	210	620		1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U	21	210		1
04688	N-Nitrosodiphenylamine	86-30-6	21	U	21	210		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	210	U	210	620		1
04688	Phenol	108-95-2	21	U	21	210		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169023
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4508 SDG#: DE045-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	1,2,4-Trichlorobenzene	120-82-1	21	U	21	210		1
04688	2,4,5-Trichlorophenol	95-95-4	41	U	41	210		1
04688	2,4,6-Trichlorophenol	88-06-2	41	U	41	210		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.83	U	0.83	2.1		1
10138	Acenaphthylene	208-96-8	0.41	U	0.41	2.1		1
10138	Anthracene	120-12-7	0.41	U	0.41	2.1		1
10138	Benzo(a)anthracene	56-55-3	0.83	U	0.83	2.1		1
10138	Benzo(a)pyrene	50-32-8	0.83	U	0.83	2.1		1
10138	Benzo(b)fluoranthene	205-99-2	0.83	U	0.83	2.1		1
10138	Benzo(g,h,i)perylene	191-24-2	0.83	U	0.83	2.1		1
10138	Benzo(k)fluoranthene	207-08-9	0.83	U	0.83	2.1		1
10138	Butylbenzylphthalate	85-68-7	7.4	U	7.4	22		1
10138	Di-n-butylphthalate	84-74-2	7.4	U	7.4	22		1
10138	Chrysene	218-01-9	0.41	U	0.41	2.1		1
10138	Dibenz(a,h)anthracene	53-70-3	0.83	U	0.83	2.1		1
10138	Diethylphthalate	84-66-2	7.4	U	7.4	22		1
10138	Dimethylphthalate	131-11-3	7.4	U	7.4	22		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	8.2	J	7.4	22		1
10138	Fluoranthene	206-44-0	0.83	U	0.83	2.1		1
10138	Fluorene	86-73-7	0.83	U	0.83	2.1		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.83	U	0.83	2.1		1
10138	1-Methylnaphthalene	90-12-0	0.83	U	0.83	2.1		1
10138	2-Methylnaphthalene	91-57-6	0.83	U	0.83	2.1		1
10138	Naphthalene	91-20-3	0.83	U	0.83	2.1		1
10138	N-Nitrosodimethylamine	62-75-9	0.83	U	0.83	2.1		1
10138	Di-n-octylphthalate	117-84-0	7.4	U	7.4	22		1
10138	Phenanthrene	85-01-8	0.83	U	0.83	2.1		1
10138	Pyrene	129-00-0	0.83	U	0.83	2.1		1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.5	U	1.5	4.5		1
10401	Dalapon	75-99-0	5.4	U	5.4	11		1
10401	2,4-DB	94-82-6	0.77	U	0.77	2.1		1
10401	Dicamba	1918-00-9	0.50	U	0.50	1.5		1
10401	Dinoseb	88-85-7	0.99	U	0.99	3.0		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.99	U	0.99	2.1		1
10401	MCPA	94-74-6	94	U	94	310		1
10401	MCPP (Mecoprop)	93-65-2	93	U	93	310		1
10401	2,4,5-T	93-76-5	0.10	U	0.10	0.21		1
10401	2,4,5-TP	93-72-1	0.093	U	0.093	0.21		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.082	U	0.082	0.21		1
01363	Alpha BHC	319-84-6	0.042	U	0.042	0.21		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169023
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4508 SDG#: DE045-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Beta BHC	319-85-7	0.074	U	0.074	0.21		1
01363	Gamma BHC - Lindane	58-89-9	0.042	U	0.042	0.21		1
01363	Chlordane	57-74-9	0.99	U	0.99	4.2		1
01363	p,p-DDD	72-54-8	0.082	U	0.082	0.42		1
01363	p,p-DDE	72-55-9	0.082	U	0.082	0.42		1
01363	p,p-DDT	50-29-3	0.082	U	0.082	0.42		1
01363	Delta BHC	319-86-8	0.045	U	0.045	0.21		1
01363	Dieldrin	60-57-1	0.082	U	0.082	0.42		1
01363	Endosulfan I	959-98-8	0.054	U	0.054	0.21		1
01363	Endosulfan II	33213-65-9	0.14	U	0.14	0.42		1
01363	Endosulfan Sulfate	1031-07-8	0.082	U	0.082	0.42		1
01363	Endrin	72-20-8	0.082	U	0.082	0.42		1
01363	Endrin Aldehyde	7421-93-4	0.082	U	0.082	0.42		1
01363	Endrin Ketone	53494-70-5	0.082	U	0.082	0.42		1
01363	Heptachlor	76-44-8	0.074	U	0.074	0.21		1
01363	Heptachlor Epoxide	1024-57-3	0.042	U	0.042	0.21		1
01363	Methoxychlor	72-43-5	0.42	U	0.42	2.1		1
01363	Mirex	2385-85-5	0.082	U	0.082	0.42		1
01363	Toxaphene	8001-35-2	2.7	U	2.7	8.2		1

The surrogate data is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract. Similar results were obtained in both extracts.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	4.1		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	4.1		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	4.1		1
10225	PCB-1016	12674-11-2	0.41	U	0.41	2.1		1
10225	PCB-1221	11104-28-2	0.62	U	0.62	2.1		1
10225	PCB-1232	11141-16-5	0.64	U	0.64	2.1		1
10225	PCB-1242	53469-21-9	0.62	U	0.62	2.1		1
10225	PCB-1248	12672-29-6	0.41	U	0.41	2.1		1
10225	PCB-1254	11097-69-1	3.2		0.41	2.1		1
10225	PCB-1260	11096-82-5	2.1		0.41	2.1		1
10225	PCB-1262	37324-23-5	0.41	U	0.41	2.1		1
10225	PCB-1268	11100-14-4	0.41	U	0.41	2.1		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,300		6.23	24.8		1
07914	Boron	7440-42-8	15.7		1.10	6.19		1
01650	Calcium	7440-70-2	31,400		7.59	24.8		1
01654	Iron	7439-89-6	32,800		5.83	24.8		1
01656	Lithium	7439-93-2	34.3		0.27	2.5		1
01657	Magnesium	7439-95-4	9,100		3.14	12.4		1
06958	Manganese	7439-96-5	398		0.0965	0.619		1
10145	Phosphorus	7723-14-0	641		0.693	12.4		1
01662	Potassium	7440-09-7	6,980		22.3	61.9		1
01667	Sodium	7440-23-5	155		46.2	124		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169023
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4508 SDG#: DE045-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07968	Strontium	7440-24-6	67.1		0.0767	0.619		1
06969	Tin	7440-31-5	2.30	J	1.24	12.4		1
06970	Titanium	7440-32-6	1,550		0.470	1.24		1
10146	Zirconium	7440-67-7	6.96		1.04	6.19		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.113	J	0.0721	0.240		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.81		0.0721	0.481		2
06126	Barium	7440-39-3	147		0.130	0.481		2
06127	Beryllium	7440-41-7	0.797		0.0192	0.120		2
06128	Cadmium	7440-43-9	0.371		0.0433	0.120		2
06131	Chromium	7440-47-3	43.6		0.144	0.481		2
06132	Cobalt	7440-48-4	11.6		0.0240	0.120		2
06133	Copper	7440-50-8	17.8		0.0793	0.481		2
06135	Lead	7439-92-1	12.9		0.0125	0.240		2
06138	Molybdenum	7439-98-7	0.614		0.0601	0.120		2
06139	Nickel	7440-02-0	21.8		0.120	0.481		2
06141	Selenium	7782-49-2	0.517		0.0481	0.481		2
06142	Silver	7440-22-4	0.0368	J	0.0144	0.120		2
06145	Thallium	7440-28-0	0.454		0.0360	0.120		2
06148	Vanadium	7440-62-2	83.9		0.0264	0.120		2
06149	Zinc	7440-66-6	113		0.673	3.60		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0343	J	0.0033	0.114		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3		0.99	1.2		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.1	U	11.1	37.1		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.37	J	0.25	1.2		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	471		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.88		0.0100	0.0100		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169023
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4508 SDG#: DE045-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	19.2	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011	14:59	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011	03:21	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010	06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010	08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103620013A	01/01/2011	08:31	Sarah M Snyder	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103610029A	01/08/2011	03:31	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011	03:51	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103610029A	12/28/2010	07:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010	06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103620013A	12/29/2010	00:45	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010	18:09	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011	10:41	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011	10:41	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169023
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4508 SDG#: DE045-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:41	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:41	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:41	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:41	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:35	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 19:06	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 19:02	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 14:06	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	99		6.8	8.1		0.93
06192	Benzene	71-43-2	0.10	U	0.10	4.1		0.93
06192	Bromobenzene	108-86-1	0.13	U	0.13	4.1		0.93
06192	Bromochloromethane	74-97-5	0.34	U	0.34	4.1		0.93
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.1		0.93
06192	Bromoform	75-25-2	0.41	U	0.41	4.1		0.93
06192	Bromomethane	74-83-9	0.25	U	0.25	4.1		0.93
06192	2-Butanone	78-93-3	20		1.2	8.1		0.93
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.1		0.93
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.1		0.93
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	4.1		0.93
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	4.1		0.93
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.1		0.93
06192	Chloroethane	75-00-3	0.13	U	0.13	4.1		0.93
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31	U	0.31	4.1		0.93
06192	Chloroform	67-66-3	0.12	U	0.12	4.1		0.93
06192	Chloromethane	74-87-3	0.34	U	0.34	4.1		0.93
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	4.1		0.93
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	4.1		0.93
06192	Chlorotrifluoroethene	79-38-9	0.51	U	0.51	5.1		0.93
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.71	U	0.71	4.1		0.93
06192	Dibromochloromethane	124-48-1	0.20	U	0.20	4.1		0.93
06192	1,2-Dibromoethane	106-93-4	0.17	U	0.17	4.1		0.93
06192	Dibromomethane	74-95-3	0.24	U	0.24	4.1		0.93
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.1		0.93
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.1		0.93
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	4.1		0.93
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.1		0.93
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.1		0.93
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	4.1		0.93
06192	1,1-Dichloroethene	75-35-4	0.40	U	0.40	4.1		0.93
06192	cis-1,2-Dichloroethene	156-59-2	0.19	U	0.19	4.1		0.93
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.1		0.93
06192	1,2-Dichloropropane	78-87-5	0.17	U	0.17	4.1		0.93
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.1		0.93
06192	2,2-Dichloropropane	594-20-7	0.17	U	0.17	4.1		0.93
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	4.1		0.93
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	4.1		0.93
06192	trans-1,3-Dichloropropene	10061-02-6	0.17	U	0.17	4.1		0.93
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.1		0.93
06192	Freon 113	76-13-1	0.11	U	0.11	4.1		0.93
06192	Freon 133a	75-88-7	0.51	U	0.51	5.1		0.93
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	4.1		0.93
06192	2-Hexanone	591-78-6	1.6	U	1.6	8.1		0.93
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.1		0.93
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.1		0.93
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21	U	0.21	4.1		0.93
06192	4-Methyl-2-pentanone	108-10-1	0.40	U	0.40	8.1		0.93
06192	Methylene Chloride	75-09-2	0.96	J	0.24	4.1		0.93
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.1		0.93

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.10	U	0.10	4.1		0.93
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.1		0.93
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23	U	0.23	4.1		0.93
06192	Tetrachloroethene	127-18-4	0.20	U	0.20	4.1		0.93
06192	Toluene	108-88-3	0.13	J	0.08	4.1		0.93
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	4.1		0.93
06192	1,2,4-Trichlorobenzene	120-82-1	0.18	U	0.18	4.1		0.93
06192	1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	4.1		0.93
06192	1,1,2-Trichloroethane	79-00-5	0.27	U	0.27	4.1		0.93
06192	Trichloroethene	79-01-6	0.15	U	0.15	4.1		0.93
06192	Trichlorofluoromethane	75-69-4	0.30	U	0.30	4.1		0.93
06192	1,2,3-Trichloropropane	96-18-4	0.34	U	0.34	4.1		0.93
06192	1,2,4-Trimethylbenzene	95-63-6	0.41	U	0.41	4.1		0.93
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.1		0.93
06192	Vinyl Chloride	75-01-4	0.20	U	0.20	4.1		0.93
06192	m+p-Xylene	179601-23-1	0.17	U	0.17	4.1		0.93
06192	o-Xylene	95-47-6	0.17	U	0.17	4.1		0.93
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.7	U	5.7	17		26.04
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	18.2	U	18.2	36.5		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	1.1	J	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	3.7		0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	2.1		0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	3.6		0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	1.4	J	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U	6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U	6.6	20		1
10138	Chrysene	218-01-9	3.6		0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U	6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U	6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	7.2	J	6.6	20		1
10138	Fluoranthene	206-44-0	8.2		0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U	0.73	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6	U	6.6	20		1
10138	Phenanthrene	85-01-8	2.7		0.73	1.8		1
10138	Pyrene	129-00-0	8.0		0.73	1.8		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.0		23.95
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	82	U	82	160	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	55	U	55	160	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	330	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	330	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	55	U	55	160	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	55	U	55	160	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	55	U	55	160	10000000	1
10132	HMX	2691-41-0	140	U	140	410	10000000	1
10132	Nitrobenzene	98-95-3	55	U	55	160	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,300	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	160	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U	140	160	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	160	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,300	10000000	1
10132	RDX	121-82-4	68	U	68	160	10000000	1
10132	Tetryl	479-45-8	84	U	84	160	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	55	U	55	160	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	55	U	55	160	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	7,600		660	1,600		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	55	U	55	180		50
10225	Aroclor 5442	12642-23-8	55	U	55	180		50
10225	Aroclor 5460	11126-42-4	55	U	55	180		50
10225	PCB-1016	12674-11-2	18	U	18	93		50
10225	PCB-1221	11104-28-2	27	U	27	93		50
10225	PCB-1232	11141-16-5	28	U	28	93		50
10225	PCB-1242	53469-21-9	27	U	27	93		50
10225	PCB-1248	12672-29-6	18	U	18	93		50
10225	PCB-1254	11097-69-1	18	U	18	93		50
10225	PCB-1260	11096-82-5	18	U	18	93		50
10225	PCB-1262	37324-23-5	18	U	18	93		50
10225	PCB-1268	11100-14-4	18	U	18	93		50
	Due to the nature of the sample extract matrix, a dilution was used for the analysis. The reporting limits were raised accordingly.							
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C15-C20)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C21-C30)	n.a.	2.7		0.44	1.3		1
10199	EFH (C30 - C40)	n.a.	8.1		0.44	1.3		1
10199	EFH (C8-C11)	n.a.	0.44	U	0.44	1.3		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	550		1
10501	Isopropanol	67-63-0	110	U	110	550		1
10501	Methanol	67-56-1	740		110	550		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.5	U	5.5	14		1
08283	Ethylene glycol	107-21-1	5.5	U	5.5	14		1
08283	Propylene glycol	57-55-6	5.5	U	5.5	14		1
	The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.6	U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6	U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6	U	1.6	3.8		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,000		5.40	21.5		1
07914	Boron	7440-42-8	4.55	J	0.955	5.36		1
01650	Calcium	7440-70-2	2,630		6.58	21.5		1
01654	Iron	7439-89-6	17,200		5.05	21.5		1
01656	Lithium	7439-93-2	21.1		0.24	2.1		1
01657	Magnesium	7439-95-4	3,660		2.72	10.7		1
06958	Manganese	7439-96-5	273		0.0837	0.536		1
10145	Phosphorus	7723-14-0	434		0.601	10.7		1
01662	Potassium	7440-09-7	3,090		19.3	53.6		1
01667	Sodium	7440-23-5	59.8	J	40.0	107		1
07968	Strontium	7440-24-6	19.4		0.0665	0.536		1
06969	Tin	7440-31-5	1.98	J	1.07	10.7		1
06970	Titanium	7440-32-6	1,030		0.408	1.07		1
10146	Zirconium	7440-67-7	2.33	J	0.901	5.36		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0644	U	0.0644	0.215		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	3.87		0.0644	0.429		2
06126	Barium	7440-39-3	110		0.116	0.429		2
06127	Beryllium	7440-41-7	0.562		0.0172	0.107		2
06128	Cadmium	7440-43-9	0.188		0.0386	0.107		2
06131	Chromium	7440-47-3	19.8		0.129	0.429		2
06132	Cobalt	7440-48-4	6.01		0.0215	0.107		2
06133	Copper	7440-50-8	9.66		0.0708	0.429		2
06135	Lead	7439-92-1	5.93		0.0112	0.215		2
06138	Molybdenum	7439-98-7	0.664		0.0536	0.107		2
06139	Nickel	7440-02-0	12.7		0.107	0.429		2
06141	Selenium	7782-49-2	0.127	J	0.0429	0.429		2
06142	Silver	7440-22-4	0.0388	J	0.0129	0.107		2
06145	Thallium	7440-28-0	0.286		0.0322	0.107		2
06148	Vanadium	7440-62-2	38.9		0.0236	0.107		2
06149	Zinc	7440-66-6	80.6		0.601	3.22		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0029	U	0.0029	0.102		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3		0.88	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2	J	0.88	1.6		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.8		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.44	J	0.22	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4509 SDG#: DE045-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9012B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.55		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	432		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.63		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	8.6		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-282-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103543AA	12/21/2010	03:33	Laura M Krieger	0.93
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103571AA	12/23/2010	09:49	Jason M Long	26.04
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010	17:33	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035223369	12/18/2010	17:53	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035223369	12/18/2010	17:53	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035223369	12/18/2010	17:33	Christopher D Meeks	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/20/2011	15:01	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011	15:35	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011	03:53	Gregory J Drahovsky	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4509 SDG#: DE045-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10354A34A	12/20/2010 21:57	Marie D John	23.95
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:32	Christopher D Meeks	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103630002A	01/04/2011 20:44	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103560015A	12/23/2010 22:09	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 04:28	Lindsey K Lafferty	50
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103560015A	12/22/2010 17:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103630002A	12/30/2010 14:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 13:57	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540003A	12/21/2010 18:14	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103540008A	12/22/2010 21:15	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550028A	12/24/2010 16:12	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550028A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103540008A	12/20/2010 15:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103540003A	12/21/2010 10:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
07914	Boron	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
01650	Calcium	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
01654	Iron	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
01656	Lithium	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
01657	Magnesium	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:12	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:12	John P Hook	1
01662	Potassium	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:12	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:12	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:12	John P Hook	1
06970	Titanium	SW-846 6010B	3	103575708005	12/31/2010 11:01	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:12	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169024
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4509 SDG#: DE045-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:44	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:36	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 19:20	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11010010202A	01/11/2011 19:20	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 19:25	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 14:22	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10364102201A	12/30/2010 18:46	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10364102201A	12/30/2010 08:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4510 SDG#: DE045-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	47		6.6	7.9		0.91
06192	Benzene	71-43-2	0.1	U	0.1	4.0		0.91
06192	Bromobenzene	108-86-1	0.13	U	0.13	4.0		0.91
06192	Bromochloromethane	74-97-5	0.33	U	0.33	4.0		0.91
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.0		0.91
06192	Bromoform	75-25-2	0.40	U	0.40	4.0		0.91
06192	Bromomethane	74-83-9	0.25	U	0.25	4.0		0.91
06192	2-Butanone	78-93-3	5.8	J	1.2	7.9		0.91
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.0		0.91
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.0		0.91
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	4.0		0.91
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	4.0		0.91
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.0		0.91
06192	Chloroethane	75-00-3	0.13	U	0.13	4.0		0.91
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30	U	0.30	4.0		0.91
06192	Chloroform	67-66-3	0.12	U	0.12	4.0		0.91
06192	Chloromethane	74-87-3	0.33	U	0.33	4.0		0.91
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	4.0		0.91
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	4.0		0.91
06192	Chlorotrifluoroethene	79-38-9	0.50	U	0.50	5.0		0.91
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.69	U	0.69	4.0		0.91
06192	Dibromochloromethane	124-48-1	0.20	U	0.20	4.0		0.91
06192	1,2-Dibromoethane	106-93-4	0.17	U	0.17	4.0		0.91
06192	Dibromomethane	74-95-3	0.24	U	0.24	4.0		0.91
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.0		0.91
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.0		0.91
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	4.0		0.91
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.0		0.91
06192	1,1-Dichloroethane	75-34-3	0.1	U	0.1	4.0		0.91
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	4.0		0.91
06192	1,1-Dichloroethene	75-35-4	0.39	U	0.39	4.0		0.91
06192	cis-1,2-Dichloroethene	156-59-2	0.19	U	0.19	4.0		0.91
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.0		0.91
06192	1,2-Dichloropropane	78-87-5	0.17	U	0.17	4.0		0.91
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.0		0.91
06192	2,2-Dichloropropane	594-20-7	0.17	U	0.17	4.0		0.91
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	4.0		0.91
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	4.0		0.91
06192	trans-1,3-Dichloropropene	10061-02-6	0.17	U	0.17	4.0		0.91
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.0		0.91
06192	Freon 113	76-13-1	0.11	U	0.11	4.0		0.91
06192	Freon 133a	75-88-7	0.50	U	0.50	5.0		0.91
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	4.0		0.91
06192	2-Hexanone	591-78-6	1.6	U	1.6	7.9		0.91
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.0		0.91
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.0		0.91
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21	U	0.21	4.0		0.91
06192	4-Methyl-2-pentanone	108-10-1	0.39	U	0.39	7.9		0.91
06192	Methylene Chloride	75-09-2	0.85	J	0.24	4.0		0.91
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.0		0.91

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4510 SDG#: DE045-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.1	U	0.1	4.0		0.91
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.0		0.91
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23	U	0.23	4.0		0.91
06192	Tetrachloroethene	127-18-4	0.20	U	0.20	4.0		0.91
06192	Toluene	108-88-3	0.12	J	0.08	4.0		0.91
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	4.0		0.91
06192	1,2,4-Trichlorobenzene	120-82-1	0.18	U	0.18	4.0		0.91
06192	1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	4.0		0.91
06192	1,1,2-Trichloroethane	79-00-5	0.27	U	0.27	4.0		0.91
06192	Trichloroethene	79-01-6	0.15	U	0.15	4.0		0.91
06192	Trichlorofluoromethane	75-69-4	0.29	U	0.29	4.0		0.91
06192	1,2,3-Trichloropropane	96-18-4	0.33	U	0.33	4.0		0.91
06192	1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	4.0		0.91
06192	1,3,5-Trimethylbenzene	108-67-8	0.1	U	0.1	4.0		0.91
06192	Vinyl Chloride	75-01-4	0.20	U	0.20	4.0		0.91
06192	m+p-Xylene	179601-23-1	0.17	U	0.17	4.0		0.91
06192	o-Xylene	95-47-6	0.17	U	0.17	4.0		0.91
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.5	U	4.5	13		20.49
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	18.3	U	18.3	36.5		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4510 SDG#: DE045-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	37	U	37	180		1
04688	4-Methylphenol	106-44-5	37	U	37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	37	U	37	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.8		1
10138	Anthracene	120-12-7	0.37	U	0.37	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U	6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U	6.6	20		1
10138	Chrysene	218-01-9	0.37	U	0.37	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U	6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U	6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	7.6	J	6.6	20		1
10138	Fluoranthene	206-44-0	0.73	U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U	0.73	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4510 SDG#: DE045-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	14	J	6.6	20		1
10138	Phenanthrene	85-01-8	0.73	U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73	U	0.73	1.8		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1		22.05
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	82	U	82	160	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	55	U	55	160	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	330	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	330	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	55	U	55	160	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	55	U	55	160	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	55	U	55	160	10000000	1
10132	HMX	2691-41-0	140	U	140	410	10000000	1
10132	Nitrobenzene	98-95-3	55	U	55	160	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,300	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	160	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U	140	160	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	160	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,300	10000000	1
10132	RDX	121-82-4	68	U	68	160	10000000	1
10132	Tetryl	479-45-8	84	U	84	160	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	55	U	55	160	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	55	U	55	160	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4510 SDG#: DE045-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	8,100		660	1,600		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9		1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.9		1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.62	J	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.36	U	0.36	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C15-C20)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C21-C30)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C30 - C40)	n.a.	1.0	J	0.44	1.3		1
10199	EFH (C8-C11)	n.a.	0.44	U	0.44	1.3		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	550		1
10501	Isopropanol	67-63-0	110	U	110	550		1
10501	Methanol	67-56-1	330	J	110	550		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.5	U	5.5	14		1
08283	Ethylene glycol	107-21-1	5.5	U	5.5	14		1
08283	Propylene glycol	57-55-6	5.5	U	5.5	14		1
	The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.6	U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6	U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6	U	1.6	3.8		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,100		5.30	21.1		1
07914	Boron	7440-42-8	5.08	J	0.937	5.27		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4510 SDG#: DE045-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	2,150		6.46	21.1		1
01654	Iron	7439-89-6	16,500		4.96	21.1		1
01656	Lithium	7439-93-2	20.3		0.23	2.1		1
01657	Magnesium	7439-95-4	3,700		2.68	10.5		1
06958	Manganese	7439-96-5	236		0.0821	0.527		1
10145	Phosphorus	7723-14-0	477		0.590	10.5		1
01662	Potassium	7440-09-7	3,520		19.0	52.7		1
01667	Sodium	7440-23-5	83.3	J	39.3	105		1
07968	Strontium	7440-24-6	17.6		0.0653	0.527		1
06969	Tin	7440-31-5	2.05	J	1.05	10.5		1
06970	Titanium	7440-32-6	980		0.400	1.05		1
10146	Zirconium	7440-67-7	2.99	J	0.885	5.27		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.105	J	0.0632	0.211		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.22		0.0632	0.421		2
06126	Barium	7440-39-3	116		0.114	0.421		2
06127	Beryllium	7440-41-7	0.599		0.0169	0.105		2
06128	Cadmium	7440-43-9	0.229		0.0379	0.105		2
06131	Chromium	7440-47-3	21.0		0.126	0.421		2
06132	Cobalt	7440-48-4	6.15		0.0211	0.105		2
06133	Copper	7440-50-8	10.4		0.0695	0.421		2
06135	Lead	7439-92-1	5.86		0.0110	0.211		2
06138	Molybdenum	7439-98-7	0.748		0.0527	0.105		2
06139	Nickel	7440-02-0	13.3		0.105	0.421		2
06141	Selenium	7782-49-2	0.135	J	0.0421	0.421		2
06142	Silver	7440-22-4	0.0361	J	0.0126	0.105		2
06145	Thallium	7440-28-0	0.285		0.0316	0.105		2
06148	Vanadium	7440-62-2	39.3		0.0232	0.105		2
06149	Zinc	7440-66-6	65.9		0.590	3.16		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0030	U	0.0030	0.105		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6		0.88	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2	J	0.88	1.6		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9	U	9.9	32.9		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.57	J	0.22	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4510 SDG#: DE045-10

CAT No.	Analysis Name		CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		**SW-846 9012B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B		57-12-5	0.20	U	0.20	0.55		1
		ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	437		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.								
		SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.55		0.0100	0.0100		1
Wet Chemistry		**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	8.7		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.								

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-282-SA5B-SB-7.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103543AA	12/21/2010	03:56	Laura M Krieger	0.91
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103571AA	12/23/2010	10:09	Jason M Long	20.49
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010	17:36	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035223369	12/18/2010	17:53	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035223369	12/18/2010	17:54	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035223369	12/18/2010	17:36	Christopher D Meeks	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011	13:37	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011	16:10	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011	04:25	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010	10:40	Kelli M Barto	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4510 SDG#: DE045-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10354A34A	12/20/2010 22:33	Marie D John	22.05
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:36	Christopher D Meeks	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103630002A	01/04/2011 21:27	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103560015A	12/23/2010 22:19	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 04:47	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103560015A	12/22/2010 17:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103630002A	12/30/2010 14:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 14:22	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540003A	12/21/2010 18:29	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103540008A	12/22/2010 22:35	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550028A	12/24/2010 19:11	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550028A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103540008A	12/20/2010 15:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103540003A	12/21/2010 10:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:16	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:47	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169025
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4510 SDG#: DE045-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:47	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:47	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:47	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:37	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 20:03	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11010010202A	01/11/2011 20:03	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 19:48	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 14:38	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10364102201A	12/30/2010 18:48	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10364102201A	12/30/2010 08:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4511 SDG#: DE045-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	16		7.6	9.0		0.95
06192	Benzene	71-43-2	0.11	U	0.11	4.5		0.95
06192	Bromobenzene	108-86-1	0.15	U	0.15	4.5		0.95
06192	Bromochloromethane	74-97-5	0.37	U	0.37	4.5		0.95
06192	Bromodichloromethane	75-27-4	0.09	U	0.09	4.5		0.95
06192	Bromoform	75-25-2	0.45	U	0.45	4.5		0.95
06192	Bromomethane	74-83-9	0.28	U	0.28	4.5		0.95
06192	2-Butanone	78-93-3	1.4	U	1.4	9.0		0.95
06192	n-Butylbenzene	104-51-8	0.14	U	0.14	4.5		0.95
06192	sec-Butylbenzene	135-98-8	0.07	U	0.07	4.5		0.95
06192	tert-Butylbenzene	98-06-6	0.18	U	0.18	4.5		0.95
06192	Carbon Tetrachloride	56-23-5	0.16	U	0.16	4.5		0.95
06192	Chlorobenzene	108-90-7	0.12	U	0.12	4.5		0.95
06192	Chloroethane	75-00-3	0.15	U	0.15	4.5		0.95
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.34	U	0.34	4.5		0.95
06192	Chloroform	67-66-3	0.14	U	0.14	4.5		0.95
06192	Chloromethane	74-87-3	0.37	U	0.37	4.5		0.95
06192	2-Chlorotoluene	95-49-8	0.16	U	0.16	4.5		0.95
06192	4-Chlorotoluene	106-43-4	0.16	U	0.16	4.5		0.95
06192	Chlorotrifluoroethene	79-38-9	0.57	U	0.57	5.6		0.95
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.79	U	0.79	4.5		0.95
06192	Dibromochloromethane	124-48-1	0.23	U	0.23	4.5		0.95
06192	1,2-Dibromoethane	106-93-4	0.19	U	0.19	4.5		0.95
06192	Dibromomethane	74-95-3	0.27	U	0.27	4.5		0.95
06192	1,2-Dichlorobenzene	95-50-1	0.10	U	0.10	4.5		0.95
06192	1,3-Dichlorobenzene	541-73-1	0.14	U	0.14	4.5		0.95
06192	1,4-Dichlorobenzene	106-46-7	0.18	U	0.18	4.5		0.95
06192	Dichlorodifluoromethane	75-71-8	0.14	U	0.14	4.5		0.95
06192	1,1-Dichloroethane	75-34-3	0.11	U	0.11	4.5		0.95
06192	1,2-Dichloroethane	107-06-2	0.17	U	0.17	4.5		0.95
06192	1,1-Dichloroethene	75-35-4	0.44	U	0.44	4.5		0.95
06192	cis-1,2-Dichloroethene	156-59-2	0.22	U	0.22	4.5		0.95
06192	trans-1,2-Dichloroethene	156-60-5	0.14	U	0.14	4.5		0.95
06192	1,2-Dichloropropane	78-87-5	0.19	U	0.19	4.5		0.95
06192	1,3-Dichloropropane	142-28-9	0.09	U	0.09	4.5		0.95
06192	2,2-Dichloropropane	594-20-7	0.19	U	0.19	4.5		0.95
06192	1,1-Dichloropropene	563-58-6	0.15	U	0.15	4.5		0.95
06192	cis-1,3-Dichloropropene	10061-01-5	0.18	U	0.18	4.5		0.95
06192	trans-1,3-Dichloropropene	10061-02-6	0.19	U	0.19	4.5		0.95
06192	Ethylbenzene	100-41-4	0.07	U	0.07	4.5		0.95
06192	Freon 113	76-13-1	0.12	U	0.12	4.5		0.95
06192	Freon 133a	75-88-7	0.57	U	0.57	5.6		0.95
06192	Hexachlorobutadiene	87-68-3	0.16	U	0.16	4.5		0.95
06192	2-Hexanone	591-78-6	1.8	U	1.8	9.0		0.95
06192	Isopropylbenzene	98-82-8	0.07	U	0.07	4.5		0.95
06192	p-Isopropyltoluene	99-87-6	0.12	U	0.12	4.5		0.95
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.24	U	0.24	4.5		0.95
06192	4-Methyl-2-pentanone	108-10-1	0.44	U	0.44	9.0		0.95
06192	Methylene Chloride	75-09-2	0.73	J	0.27	4.5		0.95
06192	n-Propylbenzene	103-65-1	0.08	U	0.08	4.5		0.95

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4511 SDG#: DE045-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.11	U	0.11	4.5		0.95
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12	U	0.12	4.5		0.95
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.26	U	0.26	4.5		0.95
06192	Tetrachloroethene	127-18-4	0.23	U	0.23	4.5		0.95
06192	Toluene	108-88-3	0.11	J	0.09	4.5		0.95
06192	1,2,3-Trichlorobenzene	87-61-6	0.16	U	0.16	4.5		0.95
06192	1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	4.5		0.95
06192	1,1,1-Trichloroethane	71-55-6	0.23	U	0.23	4.5		0.95
06192	1,1,2-Trichloroethane	79-00-5	0.30	U	0.30	4.5		0.95
06192	Trichloroethene	79-01-6	0.17	U	0.17	4.5		0.95
06192	Trichlorofluoromethane	75-69-4	0.33	U	0.33	4.5		0.95
06192	1,2,3-Trichloropropane	96-18-4	0.37	U	0.37	4.5		0.95
06192	1,2,4-Trimethylbenzene	95-63-6	0.45	U	0.45	4.5		0.95
06192	1,3,5-Trimethylbenzene	108-67-8	0.11	U	0.11	4.5		0.95
06192	Vinyl Chloride	75-01-4	0.23	U	0.23	4.5		0.95
06192	m+p-Xylene	179601-23-1	0.19	U	0.19	4.5		0.95
06192	o-Xylene	95-47-6	0.19	U	0.19	4.5		0.95
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.7	U	4.7	14		19.57
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	19.9	U	19.9	39.8		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	200	U	200	600		1
04688	Benzidine	92-87-5	1,400	U	1,400	4,000		1
04688	Benzoic acid	65-85-0	200	U	200	600		1
04688	Benzyl alcohol	100-51-6	200	U	200	600		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200		1
04688	Carbazole	86-74-8	20	U	20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	40	U	40	200		1
04688	4-Chloroaniline	106-47-8	80	U	80	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200		1
04688	2-Chlorophenol	95-57-8	20	U	20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U	40	200		1
04688	Dibenzofuran	132-64-9	20	U	20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	400		1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200		1
04688	2,4-Dimethylphenol	105-67-9	40	U	40	200		1
04688	3,5-Dimethylphenol	108-68-9	40	U	40	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	600		1
04688	2,4-Dinitrophenol	51-28-5	800	U	800	2,400		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4511 SDG#: DE045-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	40	U	40	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200		1
04688	Hexachlorobenzene	118-74-1	20	U	20	200		1
04688	Hexachlorobutadiene	87-68-3	80	U	80	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	600		1
04688	Hexachloroethane	67-72-1	20	U	20	200		1
04688	Isophorone	78-59-1	20	U	20	200		1
04688	2-Methylphenol	95-48-7	40	U	40	200		1
04688	4-Methylphenol	106-44-5	40	U	40	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	20	U	20	200		1
04688	3-Nitroaniline	99-09-2	40	U	40	200		1
04688	4-Nitroaniline	100-01-6	80	U	80	200		1
04688	Nitrobenzene	98-95-3	20	U	20	200		1
04688	2-Nitrophenol	88-75-5	20	U	20	200		1
04688	4-Nitrophenol	100-02-7	200	U	200	600		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	200	U	200	600		1
04688	Phenol	108-95-2	20	U	20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	40	U	40	200		1
04688	2,4,6-Trichlorophenol	88-06-2	40	U	40	200		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.80	U	0.80	2.0		1
10138	Acenaphthylene	208-96-8	0.40	U	0.40	2.0		1
10138	Anthracene	120-12-7	0.40	U	0.40	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.80	U	0.80	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.80	U	0.80	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.80	U	0.80	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.80	U	0.80	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.80	U	0.80	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.2	U	7.2	22		1
10138	Di-n-butylphthalate	84-74-2	8.1	J	7.2	22		1
10138	Chrysene	218-01-9	0.40	U	0.40	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	U	0.80	2.0		1
10138	Diethylphthalate	84-66-2	7.2	U	7.2	22		1
10138	Dimethylphthalate	131-11-3	7.2	U	7.2	22		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	12	J	7.2	22		1
10138	Fluoranthene	206-44-0	0.80	U	0.80	2.0		1
10138	Fluorene	86-73-7	0.80	U	0.80	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	U	0.80	2.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4511 SDG#: DE045-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.80	U	0.80	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.80	U	0.80	2.0		1
10138	Naphthalene	91-20-3	0.84	J	0.80	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.80	U	0.80	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.2	U	7.2	22		1
10138	Phenanthrene	85-01-8	0.80	U	0.80	2.0		1
10138	Pyrene	129-00-0	0.80	U	0.80	2.0		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.0		21.51
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	90	U	90	180	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	60	U	60	180	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U	120	360	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U	120	360	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	60	U	60	180	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	60	U	60	180	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	60	U	60	180	10000000	1
10132	HMX	2691-41-0	150	U	150	450	10000000	1
10132	Nitrobenzene	98-95-3	60	U	60	180	10000000	1
10132	Nitroglycerin	55-63-0	1,200	U	1,200	3,600	10000000	1
10132	2-Nitrotoluene	88-72-2	120	U	120	180	10000000	1
10132	3-Nitrotoluene	99-08-1	150	U	150	180	10000000	1
10132	4-Nitrotoluene	99-99-0	120	U	120	180	10000000	1
10132	PETN	78-11-5	1,200	U	1,200	3,600	10000000	1
10132	RDX	121-82-4	75	U	75	180	10000000	1
10132	Tetryl	479-45-8	91	U	91	180	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	60	U	60	180	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	60	U	60	180	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4511 SDG#: DE045-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	11,000		720	1,800		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.9		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.9		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.9		1
10225	PCB-1016	12674-11-2	0.39	U	0.39	2.0		1
10225	PCB-1221	11104-28-2	0.60	U	0.60	2.0		1
10225	PCB-1232	11141-16-5	0.62	U	0.62	2.0		1
10225	PCB-1242	53469-21-9	0.60	U	0.60	2.0		1
10225	PCB-1248	12672-29-6	0.39	U	0.39	2.0		1
10225	PCB-1254	11097-69-1	0.52	J	0.39	2.0		1
10225	PCB-1260	11096-82-5	0.39	U	0.39	2.0		1
10225	PCB-1262	37324-23-5	0.39	U	0.39	2.0		1
10225	PCB-1268	11100-14-4	0.39	U	0.39	2.0		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.48	U	0.48	1.4		1
10199	EFH (C15-C20)	n.a.	0.48	U	0.48	1.4		1
10199	EFH (C21-C30)	n.a.	3.6		0.48	1.4		1
10199	EFH (C30 - C40)	n.a.	7.6		0.48	1.4		1
10199	EFH (C8-C11)	n.a.	0.48	U	0.48	1.4		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	120	U	120	600		1
10501	Isopropanol	67-63-0	120	U	120	600		1
10501	Methanol	67-56-1	550	J	120	600		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	6.0	U	6.0	15		1
08283	Ethylene glycol	107-21-1	6.0	U	6.0	15		1
08283	Propylene glycol	57-55-6	6.0	U	6.0	15		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.8	U	1.8	4.2		1
10318	o-Terphenyl	84-15-1	1.8	U	1.8	4.2		1
10318	p-Terphenyl	92-94-4	1.8	U	1.8	4.2		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	33,000		5.95	23.7		1
07914	Boron	7440-42-8	12.3		1.05	5.91		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4511 SDG#: DE045-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	11,100		7.25	23.7		1
01654	Iron	7439-89-6	35,400		11.1	47.3		2
01656	Lithium	7439-93-2	23.6		0.26	2.4		1
01657	Magnesium	7439-95-4	7,620		3.00	11.8		1
06958	Manganese	7439-96-5	533		0.0923	0.591		1
10145	Phosphorus	7723-14-0	307		0.662	11.8		1
01662	Potassium	7440-09-7	4,470		21.3	59.1		1
01667	Sodium	7440-23-5	268		44.1	118		1
07968	Strontium	7440-24-6	35.2		0.0733	0.591		1
06969	Tin	7440-31-5	2.56	J	1.18	11.8		1
06970	Titanium	7440-32-6	1,420		0.450	1.18		1
10146	Zirconium	7440-67-7	7.39		0.994	5.91		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.172	J	0.0710	0.237		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.29		0.0710	0.473		2
06126	Barium	7440-39-3	160		0.128	0.473		2
06127	Beryllium	7440-41-7	1.03		0.0189	0.118		2
06128	Cadmium	7440-43-9	0.304		0.0426	0.118		2
06131	Chromium	7440-47-3	47.4		0.142	0.473		2
06132	Cobalt	7440-48-4	11.1		0.0237	0.118		2
06133	Copper	7440-50-8	20.1		0.0781	0.473		2
06135	Lead	7439-92-1	13.7		0.0123	0.237		2
06138	Molybdenum	7439-98-7	0.552		0.0591	0.118		2
06139	Nickel	7440-02-0	23.4		0.118	0.473		2
06141	Selenium	7782-49-2	0.197	J	0.0473	0.473		2
06142	Silver	7440-22-4	0.0599	J	0.0142	0.118		2
06145	Thallium	7440-28-0	0.395		0.0355	0.118		2
06148	Vanadium	7440-62-2	79.5		0.0260	0.118		2
06149	Zinc	7440-66-6	98.8		0.662	3.55		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0092	J	0.0033	0.115		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6		0.96	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2	J	0.96	1.8		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8	U	10.8	35.8		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.59	J	0.24	1.2		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4511 SDG#: DE045-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9012B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.21	U	0.21	0.58		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	375		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.86		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	16.3		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-281-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103543AA	12/21/2010	04:18	Laura M Krieger	0.95
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103571AA	12/23/2010	10:29	Jason M Long	19.57
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010	17:39	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035223369	12/18/2010	17:54	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035223369	12/18/2010	17:54	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035223369	12/18/2010	17:40	Christopher D Meeks	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011	13:54	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011	16:46	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011	04:57	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010	10:40	Kelli M Barto	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4511 SDG#: DE045-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10354A34A	12/20/2010 23:10	Marie D John	21.51
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:39	Christopher D Meeks	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103630002A	01/04/2011 22:09	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103560015A	12/23/2010 22:28	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 05:05	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103560015A	12/22/2010 17:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103630002A	12/30/2010 14:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 14:47	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540003A	12/21/2010 18:44	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103540008A	12/22/2010 20:43	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550028A	12/24/2010 19:56	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550028A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103540008A	12/20/2010 15:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103540003A	12/21/2010 10:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/31/2010 11:08	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:19	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169026
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4511 SDG#: DE045-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:40	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 20:17	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11010010202A	01/11/2011 20:17	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 20:11	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 14:46	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10364102201A	12/30/2010 18:49	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10364102201A	12/30/2010 08:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182102B	12/21/2010 15:45	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039402B	12/21/2010 15:45	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	43		7.7	9.3		1.01
06192	Benzene	71-43-2	0.12	U	0.12	4.6		1.01
06192	Bromobenzene	108-86-1	0.15	U	0.15	4.6		1.01
06192	Bromochloromethane	74-97-5	0.38	U	0.38	4.6		1.01
06192	Bromodichloromethane	75-27-4	0.09	U	0.09	4.6		1.01
06192	Bromoform	75-25-2	0.46	U	0.46	4.6		1.01
06192	Bromomethane	74-83-9	0.29	U	0.29	4.6		1.01
06192	2-Butanone	78-93-3	7.4	J	1.4	9.3		1.01
06192	n-Butylbenzene	104-51-8	0.14	U	0.14	4.6		1.01
06192	sec-Butylbenzene	135-98-8	0.07	U	0.07	4.6		1.01
06192	tert-Butylbenzene	98-06-6	0.18	U	0.18	4.6		1.01
06192	Carbon Tetrachloride	56-23-5	0.16	U	0.16	4.6		1.01
06192	Chlorobenzene	108-90-7	0.13	U	0.13	4.6		1.01
06192	Chloroethane	75-00-3	0.15	U	0.15	4.6		1.01
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.35	U	0.35	4.6		1.01
06192	Chloroform	67-66-3	0.14	U	0.14	4.6		1.01
06192	Chloromethane	74-87-3	0.38	U	0.38	4.6		1.01
06192	2-Chlorotoluene	95-49-8	0.16	U	0.16	4.6		1.01
06192	4-Chlorotoluene	106-43-4	0.16	U	0.16	4.6		1.01
06192	Chlorotrifluoroethene	79-38-9	0.58	U	0.58	5.8		1.01
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.81	U	0.81	4.6		1.01
06192	Dibromochloromethane	124-48-1	0.23	U	0.23	4.6		1.01
06192	1,2-Dibromoethane	106-93-4	0.20	U	0.20	4.6		1.01
06192	Dibromomethane	74-95-3	0.28	U	0.28	4.6		1.01
06192	1,2-Dichlorobenzene	95-50-1	0.10	U	0.10	4.6		1.01
06192	1,3-Dichlorobenzene	541-73-1	0.14	U	0.14	4.6		1.01
06192	1,4-Dichlorobenzene	106-46-7	0.18	U	0.18	4.6		1.01
06192	Dichlorodifluoromethane	75-71-8	0.14	U	0.14	4.6		1.01
06192	1,1-Dichloroethane	75-34-3	0.12	U	0.12	4.6		1.01
06192	1,2-Dichloroethane	107-06-2	0.17	U	0.17	4.6		1.01
06192	1,1-Dichloroethene	75-35-4	0.45	U	0.45	4.6		1.01
06192	cis-1,2-Dichloroethene	156-59-2	0.22	U	0.22	4.6		1.01
06192	trans-1,2-Dichloroethene	156-60-5	0.14	U	0.14	4.6		1.01
06192	1,2-Dichloropropane	78-87-5	0.20	U	0.20	4.6		1.01
06192	1,3-Dichloropropane	142-28-9	0.09	U	0.09	4.6		1.01
06192	2,2-Dichloropropane	594-20-7	0.20	U	0.20	4.6		1.01
06192	1,1-Dichloropropene	563-58-6	0.15	U	0.15	4.6		1.01
06192	cis-1,3-Dichloropropene	10061-01-5	0.18	U	0.18	4.6		1.01
06192	trans-1,3-Dichloropropene	10061-02-6	0.20	U	0.20	4.6		1.01
06192	Ethylbenzene	100-41-4	0.07	U	0.07	4.6		1.01
06192	Freon 113	76-13-1	0.13	U	0.13	4.6		1.01
06192	Freon 133a	75-88-7	0.58	U	0.58	5.8		1.01
06192	Hexachlorobutadiene	87-68-3	0.16	U	0.16	4.6		1.01
06192	2-Hexanone	591-78-6	1.9	U	1.9	9.3		1.01
06192	Isopropylbenzene	98-82-8	0.07	U	0.07	4.6		1.01
06192	p-Isopropyltoluene	99-87-6	0.13	U	0.13	4.6		1.01
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.24	U	0.24	4.6		1.01
06192	4-Methyl-2-pentanone	108-10-1	0.45	U	0.45	9.3		1.01
06192	Methylene Chloride	75-09-2	0.81	J	0.28	4.6		1.01
06192	n-Propylbenzene	103-65-1	0.08	U	0.08	4.6		1.01

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.12	U	0.12	4.6		1.01
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.13	U	0.13	4.6		1.01
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.27	U	0.27	4.6		1.01
06192	Tetrachloroethene	127-18-4	0.23	U	0.23	4.6		1.01
06192	Toluene	108-88-3	0.16	J	0.09	4.6		1.01
06192	1,2,3-Trichlorobenzene	87-61-6	0.16	U	0.16	4.6		1.01
06192	1,2,4-Trichlorobenzene	120-82-1	0.21	U	0.21	4.6		1.01
06192	1,1,1-Trichloroethane	71-55-6	0.23	U	0.23	4.6		1.01
06192	1,1,2-Trichloroethane	79-00-5	0.31	U	0.31	4.6		1.01
06192	Trichloroethene	79-01-6	0.17	U	0.17	4.6		1.01
06192	Trichlorofluoromethane	75-69-4	0.34	U	0.34	4.6		1.01
06192	1,2,3-Trichloropropane	96-18-4	0.38	U	0.38	4.6		1.01
06192	1,2,4-Trimethylbenzene	95-63-6	0.46	U	0.46	4.6		1.01
06192	1,3,5-Trimethylbenzene	108-67-8	0.12	U	0.12	4.6		1.01
06192	Vinyl Chloride	75-01-4	0.23	U	0.23	4.6		1.01
06192	m+p-Xylene	179601-23-1	0.20	U	0.20	4.6		1.01
06192	o-Xylene	95-47-6	0.20	U	0.20	4.6		1.01
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.8	U	4.8	14		20.94
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	27.7	J	19.0	38.1		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	76	U	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	760	U	760	2,300		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	76	U	76	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.76	U	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21		1
10138	Chrysene	218-01-9	0.38	U	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	30		6.9	21		1
10138	Fluoranthene	206-44-0	0.76	U	0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U	0.76	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76	U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21		1
10138	Phenanthrene	85-01-8	0.76	U	0.76	1.9		1
10138	Pyrene	129-00-0	0.76	U	0.76	1.9		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.0		22.4
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	86	U	86	170	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	57	U	57	170	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	340	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	340	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	57	U	57	170	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	57	U	57	170	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	57	U	57	170	10000000	1
10132	HMX	2691-41-0	140	U	140	430	10000000	1
10132	Nitrobenzene	98-95-3	57	U	57	170	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,400	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	170	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U	140	170	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	170	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,400	10000000	1
10132	RDX	121-82-4	71	U	71	170	10000000	1
10132	Tetryl	479-45-8	87	U	87	170	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	57	U	57	170	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	57	U	57	170	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	11,000		680	1,700		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.57	U	0.57	1.9		1
10225	PCB-1232	11141-16-5	0.59	U	0.59	1.9		1
10225	PCB-1242	53469-21-9	0.57	U	0.57	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.71	J	0.38	1.9		1
10225	PCB-1260	11096-82-5	0.38	U	0.38	1.9		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.46	U	0.46	1.4		1
10199	EFH (C15-C20)	n.a.	0.46	U	0.46	1.4		1
10199	EFH (C21-C30)	n.a.	1.8		0.46	1.4		1
10199	EFH (C30 - C40)	n.a.	3.8		0.46	1.4		1
10199	EFH (C8-C11)	n.a.	0.46	U	0.46	1.4		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	570		1
10501	Isopropanol	67-63-0	110	U	110	570		1
10501	Methanol	67-56-1	590		110	570		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.7	U	5.7	14		1
08283	Ethylene glycol	107-21-1	5.7	U	5.7	14		1
08283	Propylene glycol	57-55-6	5.7	U	5.7	14		1
	The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,500		5.74	22.8		1
07914	Boron	7440-42-8	5.71	J	1.02	5.71		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	2,430		7.00	22.8		1
01654	Iron	7439-89-6	21,000		5.38	22.8		1
01656	Lithium	7439-93-2	22.7		0.25	2.3		1
01657	Magnesium	7439-95-4	4,430		2.90	11.4		1
06958	Manganese	7439-96-5	212		0.0890	0.571		1
10145	Phosphorus	7723-14-0	282		0.639	11.4		1
01662	Potassium	7440-09-7	2,440		20.5	57.1		1
01667	Sodium	7440-23-5	184		42.6	114		1
07968	Strontium	7440-24-6	21.5		0.0708	0.571		1
06969	Tin	7440-31-5	2.56	J	1.14	11.4		1
06970	Titanium	7440-32-6	1,190		0.434	1.14		1
10146	Zirconium	7440-67-7	4.12	J	0.959	5.71		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0766	J	0.0659	0.220		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.74		0.0659	0.439		2
06126	Barium	7440-39-3	135		0.119	0.439		2
06127	Beryllium	7440-41-7	0.903		0.0176	0.110		2
06128	Cadmium	7440-43-9	0.116		0.0395	0.110		2
06131	Chromium	7440-47-3	27.0		0.132	0.439		2
06132	Cobalt	7440-48-4	7.60		0.0220	0.110		2
06133	Copper	7440-50-8	9.54		0.0724	0.439		2
06135	Lead	7439-92-1	8.13		0.0114	0.220		2
06138	Molybdenum	7439-98-7	0.819		0.0549	0.110		2
06139	Nickel	7440-02-0	15.4		0.110	0.439		2
06141	Selenium	7782-49-2	0.171	J	0.0439	0.439		2
06142	Silver	7440-22-4	0.0637	J	0.0132	0.110		2
06145	Thallium	7440-28-0	0.333		0.0329	0.110		2
06148	Vanadium	7440-62-2	51.8		0.0241	0.110		2
06149	Zinc	7440-66-6	59.8		0.615	3.29		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0034	J	0.0032	0.113		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.9		0.91	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.4	J	0.91	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.2		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.65	J	0.23	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4512 SDG#: DE045-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9012B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.56		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	280		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.67		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	12.4		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-281-SA5B-SB-8.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103543AA	12/21/2010 04:41	Laura M Krieger	1.01
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103571AA	12/23/2010 10:49	Jason M Long	20.94
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:43	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:54	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035223369	12/18/2010 17:54	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035223369	12/18/2010 17:43	Christopher D Meeks	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011 14:11	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 20:46	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 13:30	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4512 SDG#: DE045-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10354A34A	12/20/2010 23:46	Marie D John	22.4
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:43	Christopher D Meeks	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103630002A	01/04/2011 22:51	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103560015A	12/23/2010 22:38	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 05:24	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103560015A	12/22/2010 17:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103630002A	12/30/2010 14:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 15:12	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540003A	12/21/2010 18:58	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103540008A	12/22/2010 22:51	Robert Brown	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550028A	12/24/2010 20:41	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550028A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103540008A	12/20/2010 15:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103540003A	12/21/2010 10:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:23	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169027
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4512 SDG#: DE045-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:41	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202A	01/11/2011 20:31	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11010010202A	01/11/2011 20:31	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203A	01/11/2011 20:34	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 15:02	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10364102201A	12/30/2010 18:50	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202A	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203A	01/10/2011 12:00	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10364102201A	12/30/2010 08:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182103A	12/21/2010 17:40	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039403A	12/21/2010 17:40	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.8	U	7.8	9.4		1.04
06192	Benzene	71-43-2	0.12	U	0.12	4.7		1.04
06192	Bromobenzene	108-86-1	0.15	U	0.15	4.7		1.04
06192	Bromochloromethane	74-97-5	0.39	U	0.39	4.7		1.04
06192	Bromodichloromethane	75-27-4	0.09	U	0.09	4.7		1.04
06192	Bromoform	75-25-2	0.47	U	0.47	4.7		1.04
06192	Bromomethane	74-83-9	0.29	U	0.29	4.7		1.04
06192	2-Butanone	78-93-3	1.4	U	1.4	9.4		1.04
06192	n-Butylbenzene	104-51-8	0.14	U	0.14	4.7		1.04
06192	sec-Butylbenzene	135-98-8	0.07	U	0.07	4.7		1.04
06192	tert-Butylbenzene	98-06-6	0.19	U	0.19	4.7		1.04
06192	Carbon Tetrachloride	56-23-5	0.16	U	0.16	4.7		1.04
06192	Chlorobenzene	108-90-7	0.13	U	0.13	4.7		1.04
06192	Chloroethane	75-00-3	0.15	U	0.15	4.7		1.04
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.35	U	0.35	4.7		1.04
06192	Chloroform	67-66-3	0.14	U	0.14	4.7		1.04
06192	Chloromethane	74-87-3	0.39	U	0.39	4.7		1.04
06192	2-Chlorotoluene	95-49-8	0.16	U	0.16	4.7		1.04
06192	4-Chlorotoluene	106-43-4	0.16	U	0.16	4.7		1.04
06192	Chlorotrifluoroethene	79-38-9	0.58	U	0.58	5.8		1.04
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.82	U	0.82	4.7		1.04
06192	Dibromochloromethane	124-48-1	0.23	U	0.23	4.7		1.04
06192	1,2-Dibromoethane	106-93-4	0.20	U	0.20	4.7		1.04
06192	Dibromomethane	74-95-3	0.28	U	0.28	4.7		1.04
06192	1,2-Dichlorobenzene	95-50-1	0.11	U	0.11	4.7		1.04
06192	1,3-Dichlorobenzene	541-73-1	0.14	U	0.14	4.7		1.04
06192	1,4-Dichlorobenzene	106-46-7	0.19	U	0.19	4.7		1.04
06192	Dichlorodifluoromethane	75-71-8	0.14	U	0.14	4.7		1.04
06192	1,1-Dichloroethane	75-34-3	0.12	U	0.12	4.7		1.04
06192	1,2-Dichloroethane	107-06-2	0.18	U	0.18	4.7		1.04
06192	1,1-Dichloroethene	75-35-4	0.46	U	0.46	4.7		1.04
06192	cis-1,2-Dichloroethene	156-59-2	0.22	U	0.22	4.7		1.04
06192	trans-1,2-Dichloroethene	156-60-5	0.14	U	0.14	4.7		1.04
06192	1,2-Dichloropropane	78-87-5	0.20	U	0.20	4.7		1.04
06192	1,3-Dichloropropane	142-28-9	0.09	U	0.09	4.7		1.04
06192	2,2-Dichloropropane	594-20-7	0.20	U	0.20	4.7		1.04
06192	1,1-Dichloropropene	563-58-6	0.15	U	0.15	4.7		1.04
06192	cis-1,3-Dichloropropene	10061-01-5	0.19	U	0.19	4.7		1.04
06192	trans-1,3-Dichloropropene	10061-02-6	0.20	U	0.20	4.7		1.04
06192	Ethylbenzene	100-41-4	0.07	U	0.07	4.7		1.04
06192	Freon 113	76-13-1	0.13	U	0.13	4.7		1.04
06192	Freon 133a	75-88-7	0.58	U	0.58	5.8		1.04
06192	Hexachlorobutadiene	87-68-3	0.16	U	0.16	4.7		1.04
06192	2-Hexanone	591-78-6	1.9	U	1.9	9.4		1.04
06192	Isopropylbenzene	98-82-8	0.07	U	0.07	4.7		1.04
06192	p-Isopropyltoluene	99-87-6	0.13	U	0.13	4.7		1.04
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.25	U	0.25	4.7		1.04
06192	4-Methyl-2-pentanone	108-10-1	0.46	U	0.46	9.4		1.04
06192	Methylene Chloride	75-09-2	0.93	J	0.28	4.7		1.04
06192	n-Propylbenzene	103-65-1	0.08	U	0.08	4.7		1.04

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.12	U	0.12	4.7		1.04
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.13	U	0.13	4.7		1.04
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.27	U	0.27	4.7		1.04
06192	Tetrachloroethene	127-18-4	0.23	U	0.23	4.7		1.04
06192	Toluene	108-88-3	0.15	J	0.09	4.7		1.04
06192	1,2,3-Trichlorobenzene	87-61-6	0.16	U	0.16	4.7		1.04
06192	1,2,4-Trichlorobenzene	120-82-1	0.21	U	0.21	4.7		1.04
06192	1,1,1-Trichloroethane	71-55-6	0.23	U	0.23	4.7		1.04
06192	1,1,2-Trichloroethane	79-00-5	0.32	U	0.32	4.7		1.04
06192	Trichloroethene	79-01-6	0.18	U	0.18	4.7		1.04
06192	Trichlorofluoromethane	75-69-4	0.34	U	0.34	4.7		1.04
06192	1,2,3-Trichloropropane	96-18-4	0.39	U	0.39	4.7		1.04
06192	1,2,4-Trimethylbenzene	95-63-6	0.47	U	0.47	4.7		1.04
06192	1,3,5-Trimethylbenzene	108-67-8	0.12	U	0.12	4.7		1.04
06192	Vinyl Chloride	75-01-4	0.23	U	0.23	4.7		1.04
06192	m+p-Xylene	179601-23-1	0.20	U	0.20	4.7		1.04
06192	o-Xylene	95-47-6	0.20	U	0.20	4.7		1.04
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.7	U	4.7	14		21.04
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	76.2		18.8	37.5		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	560		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U	190	560		1
04688	Benzyl alcohol	100-51-6	190	U	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190		1
04688	4-Chloroaniline	106-47-8	75	U	75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560		1
04688	2,4-Dinitrophenol	51-28-5	750	U	750	2,200		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	37	U	37	190		1
04688	4-Methylphenol	106-44-5	37	U	37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	37	U	37	190		1
04688	4-Nitroaniline	100-01-6	75	U	75	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	560		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75	U	0.75	1.9		1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.9		1
10138	Anthracene	120-12-7	0.37	U	0.37	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.75	U	0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.75	U	0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.75	U	0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U	0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U	0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.7	U	6.7	20		1
10138	Di-n-butylphthalate	84-74-2	6.7	U	6.7	20		1
10138	Chrysene	218-01-9	0.37	U	0.37	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U	0.75	1.9		1
10138	Diethylphthalate	84-66-2	6.7	U	6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7	U	6.7	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	11	J	6.7	20		1
10138	Fluoranthene	206-44-0	0.75	U	0.75	1.9		1
10138	Fluorene	86-73-7	0.75	U	0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	U	0.75	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.75	U	0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.75	U	0.75	1.9		1
10138	Naphthalene	91-20-3	0.75	U	0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U	0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.7	U	6.7	20		1
10138	Phenanthrene	85-01-8	0.75	U	0.75	1.9		1
10138	Pyrene	129-00-0	0.75	U	0.75	1.9		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.1		23.67
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	84	U	84	170	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	56	U	56	170	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	340	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	340	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	56	U	56	170	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	56	U	56	170	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	56	U	56	170	10000000	1
10132	HMX	2691-41-0	140	U	140	420	10000000	1
10132	Nitrobenzene	98-95-3	56	U	56	170	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,400	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	170	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U	140	170	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	170	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,400	10000000	1
10132	RDX	121-82-4	70	U	70	170	10000000	1
10132	Tetryl	479-45-8	86	U	86	170	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	56	U	56	170	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	56	U	56	170	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	670	U	670	1,700		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9		1
10225	PCB-1232	11141-16-5	0.58	U	0.58	1.9		1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.49	J	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.37	U	0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.45	U	0.45	1.3		1
10199	EFH (C15-C20)	n.a.	1.1	J	0.45	1.3		1
10199	EFH (C21-C30)	n.a.	2.5		0.45	1.3		1
10199	EFH (C30 - C40)	n.a.	4.2		0.45	1.3		1
10199	EFH (C8-C11)	n.a.	0.45	U	0.45	1.3		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	560		1
10501	Isopropanol	67-63-0	110	U	110	560		1
10501	Methanol	67-56-1	240	J	110	560		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.6	U	5.6	14		1
08283	Ethylene glycol	107-21-1	5.6	U	5.6	14		1
08283	Propylene glycol	57-55-6	5.6	U	5.6	14		1
	The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	3.9		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	3.9		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	3.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,700		5.60	22.3		1
07914	Boron	7440-42-8	6.96		0.991	5.57		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01650	Calcium	7440-70-2	11,100		6.83	22.3		1
01654	Iron	7439-89-6	25,600		5.25	22.3		1
01656	Lithium	7439-93-2	21.9		0.25	2.2		1
01657	Magnesium	7439-95-4	6,390		2.83	11.1		1
06958	Manganese	7439-96-5	425		0.0869	0.557		1
10145	Phosphorus	7723-14-0	320		0.624	11.1		1
01662	Potassium	7440-09-7	2,370		20.0	55.7		1
01667	Sodium	7440-23-5	266		41.5	111		1
07968	Strontium	7440-24-6	29.2		0.0691	0.557		1
06969	Tin	7440-31-5	2.43	J	1.11	11.1		1
06970	Titanium	7440-32-6	1,280		0.423	1.11		1
10146	Zirconium	7440-67-7	5.01	J	0.936	5.57		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.137	J	0.0668	0.223		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.38		0.0668	0.445		2
06126	Barium	7440-39-3	142		0.120	0.445		2
06127	Beryllium	7440-41-7	0.864		0.0178	0.111		2
06128	Cadmium	7440-43-9	0.211		0.0401	0.111		2
06131	Chromium	7440-47-3	39.6		0.134	0.445		2
06132	Cobalt	7440-48-4	9.07		0.0223	0.111		2
06133	Copper	7440-50-8	15.0		0.0735	0.445		2
06135	Lead	7439-92-1	10.5		0.0116	0.223		2
06138	Molybdenum	7439-98-7	0.482		0.0557	0.111		2
06139	Nickel	7440-02-0	21.8		0.111	0.445		2
06141	Selenium	7782-49-2	0.115	J	0.0445	0.445		2
06142	Silver	7440-22-4	0.0298	J	0.0134	0.111		2
06145	Thallium	7440-28-0	0.374		0.0334	0.111		2
06148	Vanadium	7440-62-2	72.6		0.0245	0.111		2
06149	Zinc	7440-66-6	84.7		0.624	3.34		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0031	U	0.0031	0.109		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	6.3		0.90	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.1	J	0.90	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1	U	10.1	33.7		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.40	J	0.22	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4513 SDG#: DE045-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9012B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.19	U	0.19	0.54		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	395		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.09		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	11.1		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-026-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103543AA	12/21/2010	05:03	Laura M Krieger	1.04
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103571AA	12/23/2010	11:09	Jason M Long	21.04
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010	17:47	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035223369	12/18/2010	17:54	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035223369	12/18/2010	17:54	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035223369	12/18/2010	17:47	Christopher D Meeks	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011	14:28	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011	21:22	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011	14:03	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010	10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010	06:15	Kerrie A Freeburn	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4513 SDG#: DE045-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10354A34A	12/21/2010 00:23	Marie D John	23.67
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:47	Christopher D Meeks	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103630002A	01/04/2011 23:34	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103560015A	12/23/2010 22:57	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 05:42	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103560015A	12/22/2010 17:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103630002A	12/30/2010 14:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 19:21	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540003A	12/21/2010 19:28	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103540008A	12/22/2010 20:59	Tracy A Cole	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550028A	12/24/2010 21:25	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550028A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103540008A	12/20/2010 15:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103540003A	12/21/2010 10:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:26	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169028
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4513 SDG#: DE045-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:56	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:42	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202B	01/11/2011 20:46	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11010010202B	01/11/2011 20:46	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203B	01/11/2011 20:57	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 15:27	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10364102201A	12/30/2010 18:51	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202B	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203B	01/10/2011 12:00	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10364102201A	12/30/2010 08:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182103A	12/21/2010 17:40	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039403A	12/21/2010 17:40	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	12		6.5	7.8		0.89
06192	Benzene	71-43-2	0.1	U	0.1	3.9		0.89
06192	Bromobenzene	108-86-1	0.13	U	0.13	3.9		0.89
06192	Bromochloromethane	74-97-5	0.32	U	0.32	3.9		0.89
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	3.9		0.89
06192	Bromoform	75-25-2	0.39	U	0.39	3.9		0.89
06192	Bromomethane	74-83-9	0.24	U	0.24	3.9		0.89
06192	2-Butanone	78-93-3	1.2	U	1.2	7.8		0.89
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	3.9		0.89
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	3.9		0.89
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	3.9		0.89
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	3.9		0.89
06192	Chlorobenzene	108-90-7	0.11	U	0.11	3.9		0.89
06192	Chloroethane	75-00-3	0.13	U	0.13	3.9		0.89
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.29	U	0.29	3.9		0.89
06192	Chloroform	67-66-3	0.12	U	0.12	3.9		0.89
06192	Chloromethane	74-87-3	0.32	U	0.32	3.9		0.89
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	3.9		0.89
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	3.9		0.89
06192	Chlorotrifluoroethene	79-38-9	0.49	U	0.49	4.9		0.89
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.68	U	0.68	3.9		0.89
06192	Dibromochloromethane	124-48-1	0.20	U	0.20	3.9		0.89
06192	1,2-Dibromoethane	106-93-4	0.17	U	0.17	3.9		0.89
06192	Dibromomethane	74-95-3	0.23	U	0.23	3.9		0.89
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	3.9		0.89
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	3.9		0.89
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	3.9		0.89
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	3.9		0.89
06192	1,1-Dichloroethane	75-34-3	0.1	U	0.1	3.9		0.89
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	3.9		0.89
06192	1,1-Dichloroethene	75-35-4	0.38	U	0.38	3.9		0.89
06192	cis-1,2-Dichloroethene	156-59-2	0.19	U	0.19	3.9		0.89
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	3.9		0.89
06192	1,2-Dichloropropane	78-87-5	0.17	U	0.17	3.9		0.89
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	3.9		0.89
06192	2,2-Dichloropropane	594-20-7	0.17	U	0.17	3.9		0.89
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	3.9		0.89
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	3.9		0.89
06192	trans-1,3-Dichloropropene	10061-02-6	0.17	U	0.17	3.9		0.89
06192	Ethylbenzene	100-41-4	0.06	U	0.06	3.9		0.89
06192	Freon 113	76-13-1	0.11	U	0.11	3.9		0.89
06192	Freon 133a	75-88-7	0.49	U	0.49	4.9		0.89
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	3.9		0.89
06192	2-Hexanone	591-78-6	1.6	U	1.6	7.8		0.89
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	3.9		0.89
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	3.9		0.89
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21	U	0.21	3.9		0.89
06192	4-Methyl-2-pentanone	108-10-1	0.38	U	0.38	7.8		0.89
06192	Methylene Chloride	75-09-2	0.62	J	0.23	3.9		0.89
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	3.9		0.89

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.1	U	0.1	3.9		0.89
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	3.9		0.89
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22	U	0.22	3.9		0.89
06192	Tetrachloroethene	127-18-4	0.20	U	0.20	3.9		0.89
06192	Toluene	108-88-3	0.08	J	0.08	3.9		0.89
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	3.9		0.89
06192	1,2,4-Trichlorobenzene	120-82-1	0.18	U	0.18	3.9		0.89
06192	1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	3.9		0.89
06192	1,1,2-Trichloroethane	79-00-5	0.26	U	0.26	3.9		0.89
06192	Trichloroethene	79-01-6	0.15	U	0.15	3.9		0.89
06192	Trichlorofluoromethane	75-69-4	0.28	U	0.28	3.9		0.89
06192	1,2,3-Trichloropropane	96-18-4	0.32	U	0.32	3.9		0.89
06192	1,2,4-Trimethylbenzene	95-63-6	0.39	U	0.39	3.9		0.89
06192	1,3,5-Trimethylbenzene	108-67-8	0.1	U	0.1	3.9		0.89
06192	Vinyl Chloride	75-01-4	0.20	U	0.20	3.9		0.89
06192	m+p-Xylene	179601-23-1	0.17	U	0.17	3.9		0.89
06192	o-Xylene	95-47-6	0.17	U	0.17	3.9		0.89
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.8	U	4.8	14		21.89
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	19.3	J	18.2	36.4		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U	6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U	6.6	20		1
10138	Chrysene	218-01-9	0.36	U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U	6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U	6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.9	J	6.6	20		1
10138	Fluoranthene	206-44-0	0.73	U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U	0.73	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6	U	6.6	20		1
10138	Phenanthrene	85-01-8	0.73	U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73	U	0.73	1.8		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1		21.93
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	82	U	82	160	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	55	U	55	160	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	330	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	330	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	55	U	55	160	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	55	U	55	160	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	55	U	55	160	10000000	1
10132	HMX	2691-41-0	140	U	140	410	10000000	1
10132	Nitrobenzene	98-95-3	55	U	55	160	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,300	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	160	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U	140	160	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	160	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,300	10000000	1
10132	RDX	121-82-4	68	U	68	160	10000000	1
10132	Tetryl	479-45-8	84	U	84	160	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	55	U	55	160	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	55	U	55	160	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	660	U	660	1,600		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9		1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.9		1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.36	U	0.36	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C15-C20)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C21-C30)	n.a.	1.2	J	0.44	1.3		1
10199	EFH (C30 - C40)	n.a.	1.1	J	0.44	1.3		1
10199	EFH (C8-C11)	n.a.	0.44	U	0.44	1.3		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	550		1
10501	Isopropanol	67-63-0	110	U	110	550		1
10501	Methanol	67-56-1	220	J	110	550		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.5	U	5.5	14		1
08283	Ethylene glycol	107-21-1	6.6	U	6.6	14		1
08283	Propylene glycol	57-55-6	8.7	U	8.7	14		1
	The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported. Reporting limits were raised due to interference from the sample matrix.							
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.6	U	1.6	3.8		1
10318	o-Terphenyl	84-15-1	1.6	U	1.6	3.8		1
10318	p-Terphenyl	92-94-4	1.6	U	1.6	3.8		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,900		5.33	21.2		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07914	Boron	7440-42-8	4.31	J	0.943	5.30		1
01650	Calcium	7440-70-2	2,330		6.50	21.2		1
01654	Iron	7439-89-6	20,300		4.99	21.2		1
01656	Lithium	7439-93-2	21.5		0.23	2.1		1
01657	Magnesium	7439-95-4	4,250		2.69	10.6		1
06958	Manganese	7439-96-5	268		0.0827	0.530		1
10145	Phosphorus	7723-14-0	157		0.594	10.6		1
01662	Potassium	7440-09-7	1,870		19.1	53.0		1
01667	Sodium	7440-23-5	240		39.5	106		1
07968	Strontium	7440-24-6	20.6		0.0657	0.530		1
06969	Tin	7440-31-5	2.36	J	1.06	10.6		1
06970	Titanium	7440-32-6	1,110		0.403	1.06		1
10146	Zirconium	7440-67-7	2.87	J	0.890	5.30		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0835	J	0.0636	0.212		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.37		0.0636	0.424		2
06126	Barium	7440-39-3	103		0.114	0.424		2
06127	Beryllium	7440-41-7	0.808		0.0170	0.106		2
06128	Cadmium	7440-43-9	0.0665	J	0.0382	0.106		2
06131	Chromium	7440-47-3	27.9		0.127	0.424		2
06132	Cobalt	7440-48-4	6.61		0.0212	0.106		2
06133	Copper	7440-50-8	10.8		0.0700	0.424		2
06135	Lead	7439-92-1	8.34		0.0110	0.212		2
06138	Molybdenum	7439-98-7	0.407		0.0530	0.106		2
06139	Nickel	7440-02-0	14.6		0.106	0.424		2
06141	Selenium	7782-49-2	0.0900	J	0.0424	0.424		2
06142	Silver	7440-22-4	0.0313	J	0.0127	0.106		2
06145	Thallium	7440-28-0	0.302		0.0318	0.106		2
06148	Vanadium	7440-62-2	49.0		0.0233	0.106		2
06149	Zinc	7440-66-6	64.4		0.594	3.18		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0031	U	0.0031	0.107		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.2		0.87	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	3.5		0.87	1.6		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.8		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.32	J	0.22	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4514 SDG#: DE045-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9012B**		mg/kg		mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.19	U	0.19	0.53		1
	ASTM D1498		mV		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	480		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		Std. Units		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	7.78		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	8.4		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-026-SA5B-SB-9.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103543AA	12/21/2010	05:26	Laura M Krieger	0.89
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103571AA	12/23/2010	11:29	Jason M Long	21.89
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010	17:50	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035223369	12/18/2010	17:54	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035223369	12/18/2010	17:54	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035223369	12/18/2010	17:52	Christopher D Meeks	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011	14:45	Timothy J Trees	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011	21:57	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011	14:35	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010	10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010	06:15	Kerrie A Freeburn	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4514 SDG#: DE045-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10354A34A	12/21/2010 00:59	Marie D John	21.93
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035223369	12/18/2010 17:50	Christopher D Meeks	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103630002A	01/05/2011 00:16	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103560015A	12/23/2010 23:07	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103610033A	01/06/2011 06:01	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103610033A	12/28/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103560015A	12/22/2010 17:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103630002A	12/30/2010 14:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 15:37	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103540003A	12/21/2010 19:42	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103540008A	12/22/2010 23:39	Robert Brown	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103550028A	12/24/2010 22:10	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103550028A	12/22/2010 07:00	Kerrie A Freeburn	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103540008A	12/20/2010 15:00	Dustin A Underkoffler	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103540003A	12/21/2010 10:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:36	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:59	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169029
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4514 SDG#: DE045-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:59	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:59	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:59	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:44	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010202B	01/11/2011 21:28	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11010010202B	01/11/2011 21:28	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010203B	01/11/2011 22:29	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 15:39	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	10364102201B	12/30/2010 18:55	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010202B	01/10/2011 10:45	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010203B	01/10/2011 12:00	Nancy J Shoop	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	10364102201B	12/30/2010 08:20	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10355182103A	12/21/2010 17:40	Luz M Groff	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10355039403A	12/21/2010 17:40	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: TB-121710 Water
SSFL Area IV Collocated Soil Sampling
TB-121710

LLI Sample # WW 6169030
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:00

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4515 SDG#: DE045-15TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	6	U	6	20		1
10904	Benzene	71-43-2	0.5	U	0.5	5		1
10904	Bromobenzene	108-86-1	1	U	1	5		1
10904	Bromochloromethane	74-97-5	1	U	1	5		1
10904	Bromodichloromethane	75-27-4	1	U	1	5		1
10904	Bromoform	75-25-2	1	U	1	5		1
10904	Bromomethane	74-83-9	1	U	1	5		1
10904	2-Butanone	78-93-3	3	U	3	10		1
10904	n-Butylbenzene	104-51-8	1	U	1	5		1
10904	sec-Butylbenzene	135-98-8	1	U	1	5		1
10904	tert-Butylbenzene	98-06-6	1	U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1	U	1	5		1
10904	Chlorobenzene	108-90-7	0.8	U	0.8	5		1
10904	Chloroethane	75-00-3	1	U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2	U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.							
10904	Chloroform	67-66-3	0.8	U	0.8	5		1
10904	Chloromethane	74-87-3	1	U	1	5		1
10904	2-Chlorotoluene	95-49-8	1	U	1	5		1
10904	4-Chlorotoluene	106-43-4	1	U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2	U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2	U	2	5		1
10904	Dibromochloromethane	124-48-1	1	U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1	U	1	5		1
10904	Dibromomethane	74-95-3	1	U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2	U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1	U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1	U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8	U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8	U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8	U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1	U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1	U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1	U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1	U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1	U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1	U	1	5		1
10904	Ethylbenzene	100-41-4	0.8	U	0.8	5		1
10904	Freon 113	76-13-1	2	U	2	10		1
10904	Freon 133a	75-88-7	2	U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2	U	2	5		1
10904	2-Hexanone	591-78-6	3	U	3	10		1
10904	Isopropylbenzene	98-82-8	1	U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1	U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5	U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3	U	3	10		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: TB-121710 Water
SSFL Area IV Collocated Soil Sampling
TB-121710

LLI Sample # WW 6169030
LLI Group # 1226239
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:00

Submitted: 12/18/2010 12:40
Reported: 01/27/2011 12:46

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

E4515 SDG#: DE045-15TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	ug/l	
10904	Methylene Chloride	75-09-2	2	U	2	5		1
10904	n-Propylbenzene	103-65-1	1	U	1	5		1
10904	Styrene	100-42-5	1	U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8	U	0.8	5		1
10904	Toluene	108-88-3	0.7	U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1	U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8	U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8	U	0.8	5		1
10904	Trichloroethene	79-01-6	1	U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2	U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1	U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5		1
10904	Vinyl Chloride	75-01-4	1	U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8	U	0.8	5		1
10904	o-Xylene	95-47-6	0.8	U	0.8	5		1
GC/MS Volatiles	**SW-846 8260B SIM**		ug/l		ug/l	ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5	U	0.5	2.0		1
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20	U	20	50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	Y103572AA	12/23/2010	16:14	Sara E Johnson	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103541AA	12/20/2010	11:40	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E103541AA	12/20/2010	11:40	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y103572AA	12/23/2010	16:14	Sara E Johnson	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	10355B20A	12/22/2010	11:52	Carrie E Miller	1
01146	GC VOA Water Prep	SW-846 5030B	1	10355B20A	12/22/2010	11:52	Carrie E Miller	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B103543AA	Sample number(s): 6169024-6169029									
Acetone	6.7	U	6.7	8.0	ug/kg	130	124	32-209	4	30
Benzene	0.10	U	0.10	4.0	ug/kg	106	105	80-120	1	30
Bromobenzene	0.13	U	0.13	4.0	ug/kg	94	93	79-120	1	30
Bromochloromethane	0.33	U	0.33	4.0	ug/kg	98	95	79-124	3	30
Bromodichloromethane	0.08	U	0.08	4.0	ug/kg	98	96	78-120	1	30
Bromoform	0.40	U	0.40	4.0	ug/kg	95	92	70-120	3	30
Bromomethane	0.25	U	0.25	4.0	ug/kg	78	79	32-162	1	30
2-Butanone	1.2	U	1.2	8.0	ug/kg	114	108	46-153	5	30
n-Butylbenzene	0.12	U	0.12	4.0	ug/kg	100	99	72-120	1	30
sec-Butylbenzene	0.06	U	0.06	4.0	ug/kg	100	99	75-120	0	30
tert-Butylbenzene	0.16	U	0.16	4.0	ug/kg	94	94	75-120	1	30
Carbon Tetrachloride	0.14	U	0.14	4.0	ug/kg	104	103	69-122	1	30
Chlorobenzene	0.11	U	0.11	4.0	ug/kg	99	98	80-120	0	30
Chloroethane	0.13	U	0.13	4.0	ug/kg	82	81	37-154	1	30
2-Chloroethyl Vinyl Ether	0.30	U	0.30	4.0	ug/kg	101	101	43-146	1	30
Chloroform	0.12	U	0.12	4.0	ug/kg	103	102	80-120	1	30
Chloromethane	0.33	U	0.33	4.0	ug/kg	90	92	54-132	2	30
2-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	97	96	78-120	2	30
4-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	98	97	79-120	1	30
Chlorotrifluoroethene	0.50	U	0.50	5.0	ug/kg	56	56	22-131	1	30
1,2-Dibromo-3-chloropropane	0.70	U	0.70	4.0	ug/kg	92	89	58-120	3	30
Dibromochloromethane	0.20	U	0.20	4.0	ug/kg	97	95	77-120	2	30
1,2-Dibromoethane	0.17	U	0.17	4.0	ug/kg	98	96	80-120	2	30
Dibromomethane	0.24	U	0.24	4.0	ug/kg	101	99	80-120	3	30
1,2-Dichlorobenzene	0.09	U	0.09	4.0	ug/kg	97	97	79-120	1	30
1,3-Dichlorobenzene	0.12	U	0.12	4.0	ug/kg	94	94	78-120	0	30
1,4-Dichlorobenzene	0.16	U	0.16	4.0	ug/kg	96	95	79-120	1	30
Dichlorodifluoromethane	0.12	U	0.12	4.0	ug/kg	82	80	20-120	3	30
1,1-Dichloroethane	0.10	U	0.10	4.0	ug/kg	105	104	80-120	1	30
1,2-Dichloroethane	0.15	U	0.15	4.0	ug/kg	102	100	71-129	2	30
1,1-Dichloroethene	0.39	U	0.39	4.0	ug/kg	107	104	73-123	3	30
cis-1,2-Dichloroethene	0.19	U	0.19	4.0	ug/kg	104	103	80-120	1	30
trans-1,2-Dichloroethene	0.12	U	0.12	4.0	ug/kg	104	103	79-120	0	30
1,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	102	101	80-120	1	30
1,3-Dichloropropane	0.08	U	0.08	4.0	ug/kg	100	97	80-120	3	30
2,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	101	101	72-123	0	30
1,1-Dichloropropene	0.13	U	0.13	4.0	ug/kg	104	103	77-120	0	30
cis-1,3-Dichloropropene	0.16	U	0.16	4.0	ug/kg	92	93	80-120	0	30
trans-1,3-Dichloropropene	0.17	U	0.17	4.0	ug/kg	91	91	77-120	0	30
Ethylbenzene	0.06	U	0.06	4.0	ug/kg	101	101	80-120	1	30
Freon 113	0.11	U	0.11	4.0	ug/kg	107	104	61-126	2	30
Freon 133a	0.50	U	0.50	5.0	ug/kg	81	81	78-120	1	30
Hexachlorobutadiene	0.14	U	0.14	4.0	ug/kg	91	91	57-120	0	30
2-Hexanone	1.6	U	1.6	8.0	ug/kg	79	77	45-155	2	30
Isopropylbenzene	0.06	U	0.06	4.0	ug/kg	100	99	76-120	0	30
p-Isopropyltoluene	0.11	U	0.11	4.0	ug/kg	99	99	75-120	0	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21	U	0.21	4.0	ug/kg	96	96	74-121	1	30
4-Methyl-2-pentanone	0.39	U	0.39	8.0	ug/kg	79	76	61-134	3	30
Methylene Chloride	0.50	J	0.24	4.0	ug/kg	98	97	76-124	1	30
n-Propylbenzene	0.07	U	0.07	4.0	ug/kg	102	102	77-120	0	30
Styrene	0.10	U	0.10	4.0	ug/kg	98	98	76-120	0	30
1,1,1,2-Tetrachloroethane	0.11	U	0.11	4.0	ug/kg	99	98	80-120	1	30
1,1,2,2-Tetrachloroethane	0.23	U	0.23	4.0	ug/kg	97	94	71-123	3	30
Tetrachloroethene	0.20	U	0.20	4.0	ug/kg	104	103	77-120	1	30
Toluene	0.11	J	0.08	4.0	ug/kg	101	101	80-120	1	30
1,2,3-Trichlorobenzene	0.14	U	0.14	4.0	ug/kg	92	92	64-120	0	30
1,2,4-Trichlorobenzene	0.18	U	0.18	4.0	ug/kg	90	91	68-120	1	30
1,1,1-Trichloroethane	0.20	U	0.20	4.0	ug/kg	101	100	71-125	1	30
1,1,2-Trichloroethane	0.27	U	0.27	4.0	ug/kg	98	96	80-120	2	30
Trichloroethene	0.15	U	0.15	4.0	ug/kg	102	102	80-120	0	30
Trichlorofluoromethane	0.29	U	0.29	4.0	ug/kg	91	88	58-133	3	30
1,2,3-Trichloropropane	0.33	U	0.33	4.0	ug/kg	96	95	71-123	1	30
1,2,4-Trimethylbenzene	0.40	U	0.40	4.0	ug/kg	99	100	79-120	1	30
1,3,5-Trimethylbenzene	0.10	U	0.10	4.0	ug/kg	100	99	78-120	1	30
Vinyl Chloride	0.20	U	0.20	4.0	ug/kg	89	89	53-120	0	30
m+p-Xylene	0.17	U	0.17	4.0	ug/kg	102	101	80-120	0	30
o-Xylene	0.17	U	0.17	4.0	ug/kg	97	97	80-120	0	30
Batch number: E103541AA	Sample number(s): 6169030									
1,4-Dioxane	0.5	U	0.5	2.0	ug/l	105	106	60-132	1	30
Batch number: E103571AA	Sample number(s): 6169024-6169029									
1,4-Dioxane	5.0	U	5.0	15	ug/kg	101	98	70-130	3	30
Batch number: Y103572AA	Sample number(s): 6169030									
Acetone	6	U	6.	20	ug/l	213	204	49-234	4	30
Benzene	0.5	U	0.5	5	ug/l	95	94	79-120	1	30
Bromobenzene	1	U	1.	5	ug/l	101	99	80-120	2	30
Bromochloromethane	1	U	1.	5	ug/l	98	95	80-120	3	30
Bromodichloromethane	1	U	1.	5	ug/l	100	99	80-120	2	30
Bromoform	1	U	1.	5	ug/l	103	102	61-120	1	30
Bromomethane	1	U	1.	5	ug/l	79	80	44-120	1	30
2-Butanone	3	U	3.	10	ug/l	157*	152*	66-151	3	30
n-Butylbenzene	1	U	1.	5	ug/l	91	90	74-120	1	30
sec-Butylbenzene	1	U	1.	5	ug/l	99	98	78-120	1	30
tert-Butylbenzene	1	U	1.	5	ug/l	94	90	80-120	4	30
Carbon Tetrachloride	1	U	1.	5	ug/l	113	113	75-123	0	30
Chlorobenzene	0.8	U	0.8	5	ug/l	94	94	80-120	0	30
Chloroethane	1	U	1.	5	ug/l	85	85	49-129	0	30
2-Chloroethyl Vinyl Ether	2	U	2.	10	ug/l	112	111	56-129	1	30
Chloroform	0.8	U	0.8	5	ug/l	103	101	77-122	2	30
Chloromethane	1	U	1.	5	ug/l	81	82	60-129	0	30
2-Chlorotoluene	1	U	1.	5	ug/l	99	97	80-120	3	30
4-Chlorotoluene	1	U	1.	5	ug/l	94	92	80-120	3	30
Chlorotrifluoroethene	2	U	2.	5	ug/l	97	92	38-136	5	30
1,2-Dibromo-3-chloropropane	2	U	2.	5	ug/l	124*	119	66-120	4	30
Dibromochloromethane	1	U	1.	5	ug/l	104	104	80-120	0	30
1,2-Dibromoethane	1	U	1.	5	ug/l	100	99	80-120	1	30
Dibromomethane	1	U	1.	5	ug/l	97	97	80-120	0	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	93	91	80-120	1	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	98	95	80-120	3	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	95	93	80-120	3	30
Dichlorodifluoromethane	2	U	2.	5	ug/l	64	64	47-120	1	30
1,1-Dichloroethane	1	U	1.	5	ug/l	105	105	79-120	0	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloroethane	1	U	1.	5	ug/l	112	112	70-130	0	30
1,1-Dichloroethene	0.8	U	0.8	5	ug/l	88	86	74-123	2	30
cis-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	95	95	80-120	1	30
trans-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	95	94	80-120	1	30
1,2-Dichloropropane	1	U	1.	5	ug/l	96	96	78-120	1	30
1,3-Dichloropropane	1	U	1.	5	ug/l	103	102	80-120	1	30
2,2-Dichloropropane	1	U	1.	5	ug/l	101	102	77-124	1	30
1,1-Dichloropropene	1	U	1.	5	ug/l	101	101	80-120	0	30
cis-1,3-Dichloropropene	1	U	1.	5	ug/l	96	94	80-120	2	30
trans-1,3-Dichloropropene	1	U	1.	5	ug/l	104	103	79-120	1	30
Ethylbenzene	0.8	U	0.8	5	ug/l	99	98	79-120	0	30
Freon 113	2	U	2.	10	ug/l	93	91	69-128	2	30
Freon 133a	2	U	2.	5	ug/l	89	88	77-120	1	30
Hexachlorobutadiene	2	U	2.	5	ug/l	86	89	58-120	4	30
2-Hexanone	3	U	3.	10	ug/l	146*	143*	65-136	2	30
Isopropylbenzene	1	U	1.	5	ug/l	97	96	77-120	1	30
p-Isopropyltoluene	1	U	1.	5	ug/l	97	96	80-120	1	30
Methyl Tertiary Butyl Ether	0.5	U	0.5	5	ug/l	102	103	76-120	0	30
4-Methyl-2-pentanone	3	U	3.	10	ug/l	117	116	70-121	1	30
Methylene Chloride	2	U	2.	5	ug/l	88	86	80-120	2	30
n-Propylbenzene	1	U	1.	5	ug/l	104	102	80-120	2	30
Styrene	1	U	1.	5	ug/l	95	93	80-120	2	30
1,1,1,2-Tetrachloroethane	1	U	1.	5	ug/l	105	105	80-120	0	30
1,1,2,2-Tetrachloroethane	1	U	1.	5	ug/l	106	104	71-120	2	30
Tetrachloroethene	0.8	U	0.8	5	ug/l	97	97	80-121	0	30
Toluene	0.7	U	0.7	5	ug/l	96	95	79-120	1	30
1,2,3-Trichlorobenzene	1	U	1.	5	ug/l	90	90	65-120	1	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	91	88	67-120	3	30
1,1,1-Trichloroethane	0.8	U	0.8	5	ug/l	95	95	75-127	0	30
1,1,2-Trichloroethane	0.8	U	0.8	5	ug/l	99	98	80-120	1	30
Trichloroethene	1	U	1.	5	ug/l	95	93	80-120	1	30
Trichlorofluoromethane	2	U	2.	5	ug/l	85	83	64-129	2	30
1,2,3-Trichloropropane	1	U	1.	5	ug/l	112	110	80-120	1	30
1,2,4-Trimethylbenzene	1	U	1.	5	ug/l	103	100	74-120	4	30
1,3,5-Trimethylbenzene	1	U	1.	5	ug/l	100	98	75-120	2	30
Vinyl Chloride	1	U	1.	5	ug/l	75	74	65-125	2	30
m+p-Xylene	0.8	U	0.8	5	ug/l	91	91	80-120	0	30
o-Xylene	0.8	U	0.8	5	ug/l	92	92	80-120	0	30
Batch number: 10354WAI026	Sample number(s): 6169017-6169018									
Acenaphthene	0.010	U	0.010	0.050	ug/l	75	75	74-109	0	30
Acenaphthylene	0.010	U	0.010	0.050	ug/l	77	78	70-110	2	30
Anthracene	0.010	U	0.010	0.050	ug/l	76	77	66-111	1	30
Benzo(a)anthracene	0.010	U	0.010	0.050	ug/l	79	80	72-114	1	30
Benzo(a)pyrene	0.010	U	0.010	0.050	ug/l	74	75	64-115	2	30
Benzo(b)fluoranthene	0.010	U	0.010	0.050	ug/l	81	83	69-123	2	30
Benzo(g,h,i)perylene	0.010	U	0.010	0.050	ug/l	62*	68	68-125	10	30
Benzo(k)fluoranthene	0.010	U	0.010	0.050	ug/l	79	81	72-122	2	30
Butylbenzylphthalate	0.099	J	0.050	1.0	ug/l	83	86	70-130	4	30
Di-n-butylphthalate	0.16	J	0.050	1.0	ug/l	92	93	70-130	1	30
Chrysene	0.010	U	0.010	0.050	ug/l	76	78	76-116	3	30
Dibenz(a,h)anthracene	0.010	U	0.010	0.050	ug/l	60*	65*	71-125	8	30
Diethylphthalate	0.050	U	0.050	1.0	ug/l	92	96	70-130	4	30
Dimethylphthalate	0.050	U	0.050	1.0	ug/l	80	85	70-130	6	30
Bis(2-Ethylhexyl)phthalate	0.19	J	0.050	1.0	ug/l	80	80	70-130	0	30
Fluoranthene	0.010	U	0.010	0.050	ug/l	77	80	75-116	4	30
Fluorene	0.010	U	0.010	0.050	ug/l	80	81	75-114	2	30
Indeno(1,2,3-cd)pyrene	0.010	U	0.010	0.050	ug/l	60*	66*	69-124	10	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1-Methylnaphthalene	0.010	U	0.010	0.050	ug/l	79	78	71-117	2	30
2-Methylnaphthalene	0.010	U	0.010	0.050	ug/l	69*	67*	75-115	2	30
Naphthalene	0.010	U	0.010	0.050	ug/l	72	71*	72-109	2	30
N-Nitrosodimethylamine	0.010	U	0.010	0.050	ug/l	54*	53*	70-130	1	30
Di-n-octylphthalate	0.18	J	0.050	1.0	ug/l	79	79	70-130	1	30
Phenanthrene	0.010	U	0.010	0.050	ug/l	72*	73*	76-111	2	30
Pyrene	0.010	U	0.010	0.050	ug/l	80	83	69-118	4	30
Batch number: 10354WAM026	Sample number(s): 6169017-6169018									
Aniline	1	U	1.	5	ug/l	61	90	49-101	39*	30
Benzidine	20	U	20.	60	ug/l	52	80	20-109	44*	30
Benzoic acid	6	U	6.	15	ug/l	16	32	10-69	67*	30
Benzyl alcohol	5	U	5.	15	ug/l	81	95	66-97	16	30
4-Bromophenyl-phenylether	1	U	1.	5	ug/l	93	99	82-117	5	30
Carbazole	1	U	1.	5	ug/l	96	102	81-114	7	30
4-Chloro-3-methylphenol	1	U	1.	5	ug/l	91	100	70-123	9	30
4-Chloroaniline	1	U	1.	5	ug/l	55	83	42-124	40*	30
bis(2-Chloroethoxy)methane	1	U	1.	5	ug/l	90	97	74-124	8	30
bis(2-Chloroethyl)ether	1	U	1.	5	ug/l	89	96	77-108	7	30
bis(2-Chloroisopropyl)ether	1	U	1.	5	ug/l	90	96	62-127	6	30
2-Chloronaphthalene	2	U	2.	5	ug/l	74	78	54-132	6	30
2-Chlorophenol	1	U	1.	5	ug/l	89	101	77-108	12	30
4-Chlorophenyl-phenylether	2	U	2.	5	ug/l	91	96	82-111	6	30
Dibenzofuran	1	U	1.	5	ug/l	93	99	83-108	6	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	68	72	67-108	6	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	62*	67	63-110	9	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	64*	68	65-113	5	30
3,3'-Dichlorobenzidine	2	U	2.	5	ug/l	63	82	49-111	26	30
2,4-Dichlorophenol	1	U	1.	5	ug/l	91	99	80-109	9	30
2,4-Dimethylphenol	3	U	3.	10	ug/l	89	97	72-110	8	30
3,5-Dimethylphenol	3	U	3.	10	ug/l	94	104	70-130	10	30
4,6-Dinitro-2-methylphenol	5	U	5.	15	ug/l	83	92	78-119	11	30
2,4-Dinitrophenol	10	U	10.	30	ug/l	72	89	64-120	21	30
2,4-Dinitrotoluene	1	U	1.	5	ug/l	93	99	81-115	7	30
2,6-Dinitrotoluene	1	U	1.	5	ug/l	95	102	85-115	7	30
1,2-Diphenylhydrazine	1	U	1.	5	ug/l	96	103	78-116	6	30
Hexachlorobenzene	1	U	1.	5	ug/l	93	98	81-118	6	30
Hexachlorobutadiene	1	U	1.	5	ug/l	58	61	57-124	6	30
Hexachlorocyclopentadiene	5	U	5.	15	ug/l	30	45	10-118	40*	30
Hexachloroethane	1	U	1.	5	ug/l	53	58	52-113	9	30
Isophorone	1	U	1.	5	ug/l	92	98	74-117	7	30
2-Methylphenol	1	U	1.	5	ug/l	85	94	64-101	10	30
4-Methylphenol	2	U	2.	5	ug/l	76	91	61-103	18	30
2-Nitroaniline	1	U	1.	5	ug/l	94	103	83-116	9	30
3-Nitroaniline	1	U	1.	5	ug/l	92	104	74-113	12	30
4-Nitroaniline	1	U	1.	5	ug/l	78	87	59-100	11	30
Nitrobenzene	1	U	1.	5	ug/l	91	96	75-109	5	30
2-Nitrophenol	1	U	1.	5	ug/l	87	98	86-120	12	30
4-Nitrophenol	10	U	10.	30	ug/l	41	48	16-78	15	30
N-Nitroso-di-n-propylamine	1	U	1.	5	ug/l	90	97	69-110	8	30
N-Nitrosodiphenylamine	2	U	2.	5	ug/l	92	98	67-136	7	30
Pentachlorophenol	3	U	3.	15	ug/l	90	97	53-110	7	30
Phenol	1	U	1.	5	ug/l	43	52	29-67	19	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	71	73	71-112	3	30
2,4,5-Trichlorophenol	1	U	1.	5	ug/l	90	102	79-107	13	30
2,4,6-Trichlorophenol	1	U	1.	5	ug/l	91	98	81-113	8	30
Batch number: 10362SLF026	Sample number(s): 6169016,6169019-6169029									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Aniline	170 U		170.	500	ug/kg	37		10-107		
Benzidine	1,200 U		1,200.	3,300	ug/kg	34		15-121		
Benzoic acid	170 U		170.	500	ug/kg	92		10-154		
Benzyl alcohol	170 U		170.	500	ug/kg	86		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	90		79-117		
Carbazole	17	U	17.	170	ug/kg	94		77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	92		74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	37		10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	95		70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	86		70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	86		68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	77		67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	91		72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	93		79-110		
Dibenzofuran	17	U	17.	170	ug/kg	92		79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	89		79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	86		70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	87		74-106		
3,3'-Dichlorobenzidine	100 U		100.	330	ug/kg	39		38-105		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	94		75-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	95		72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	105		70-130		
4,6-Dinitro-2-methylphenol	170 U		170.	500	ug/kg	80		53-110		
2,4-Dinitrophenol	670 U		670.	2,000	ug/kg	77		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	95		73-115		
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	97		79-115		
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	99		77-111		
Hexachlorobenzene	17	U	17.	170	ug/kg	93		78-116		
Hexachlorobutadiene	67	U	67.	170	ug/kg	97		70-112		
Hexachlorocyclopentadiene	170 U		170.	500	ug/kg	106		46-115		
Hexachloroethane	17	U	17.	170	ug/kg	91		68-105		
Isophorone	17	U	17.	170	ug/kg	92		69-110		
2-Methylphenol	33	U	33.	170	ug/kg	87		66-110		
4-Methylphenol	33	U	33.	170	ug/kg	88		66-117		
2-Nitroaniline	17	U	17.	170	ug/kg	100		78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	82		62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	61		49-98		
Nitrobenzene	17	U	17.	170	ug/kg	96		71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	94		81-114		
4-Nitrophenol	170 U		170.	500	ug/kg	96		56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	86		63-107		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	94		67-141		
Pentachlorophenol	170 U		170.	500	ug/kg	80		35-106		
Phenol	17	U	17.	170	ug/kg	90		58-112		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	94		73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	97		76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	101		78-111		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10362SLK026	Sample number(s): 6169016,6169019-6169029									
Acenaphthene	0.67	U	0.67	1.7	ug/kg	93		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	95		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	101		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	100		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	95		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	98		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	99		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	101		66-137		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	111		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	112		84-132		
Chrysene	0.33	U	0.33	1.7	ug/kg	93		79-120		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	99		62-142		
Diethylphthalate	6.0	U	6.0	18	ug/kg	102		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	103		70-130		
Bis(2-Ethylhexyl)phthalate	6.0	U	6.0	18	ug/kg	110		67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	99		78-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	98		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	100		62-141		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	92		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	83		62-120		
Naphthalene	0.67	U	0.67	1.7	ug/kg	91		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	94		39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	112		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	93		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	96		56-121		
Batch number: 10363SLG026	Sample number(s): 6169024-6169029									
N-Nitrosodimethylamine	16.7	U	16.7	33.3	ng/kg	93		70-130		
Batch number: 10354A34A	Sample number(s): 6169024-6169029									
9a TPH by EPA 8015B Gas C5-C12	0.2	U	0.2	1.0	mg/kg	74	79	67-119	6	30
Batch number: 10355B20A	Sample number(s): 6169030									
TPH-GRO S.CA water C5-C12	20	U	20.	50	ug/l	109	109	75-135	0	30
Batch number: 103630002A	Sample number(s): 6169024-6169029									
4-Amino-2,6-Dinitrotoluene	75	U	75.	150	ug/kg	114		80-120		
2-Amino-4,6-Dinitrotoluene	50	U	50.	150	ug/kg	114		80-120		
2,6-Diamino-4-nitrotoluene	100 U		100.	300	ug/kg	95	101	54-134	6	30
2,4-Diamino-6-nitrotoluene	100 U		100.	300	ug/kg	94	100	54-134	6	30
1,3-Dinitrobenzene	50	U	50.	150	ug/kg	111		51-171		
2,4-Dinitrotoluene	50	U	50.	150	ug/kg	108		72-135		
2,6-Dinitrotoluene	50	U	50.	150	ug/kg	116		80-120		
HMX	130 U		130.	380	ug/kg	102		74-130		
Nitrobenzene	50	U	50.	150	ug/kg	110		80-120		
Nitroglycerin	1,000 U		1,000.	3,000	ug/kg	99		80-120		
2-Nitrotoluene	100 U		100.	150	ug/kg	114		78-128		
3-Nitrotoluene	130 U		130.	150	ug/kg	114		73-127		
4-Nitrotoluene	100 U		100.	150	ug/kg	113		80-120		
PETN	1,000		1,000.	3,000	ug/kg	113		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
RDX	63	U	63.	150	ug/kg	111		75-131		
Tetryl	77	U	77.	150	ug/kg	134		70-168		
1,3,5-Trinitrobenzene	50	U	50.	150	ug/kg	127		77-137		
2,4,6-Trinitrotoluene	50	U	50.	150	ug/kg	115		80-120		
Batch number: 103560015A	Sample number(s): 6169024-6169029									
17a Formaldehyde by 8315A	600	U	600.	1,500	ug/kg	96		80-126		
Batch number: 103560021A	Sample number(s): 6169017-6169018									
2,4-D	0.16	U	0.16	0.50	ug/l	140*	148*	45-128	6	30
Dalapon	0.25	U	0.25	1.3	ug/l	98	100	40-100	2	30
2,4-DB	0.30	U	0.30	1.0	ug/l	108	112	41-138	4	30
Dicamba	0.080	U	0.080	0.30	ug/l	108	112	51-144	4	30
Dinoseb	0.10	U	0.10	0.50	ug/l	60	67	23-93	11	30
2,4-DP (Dichlorprop)	0.16	U	0.16	0.50	ug/l	160*	168*	72-145	5	30
MCPA	300	U	300.	1,000	ug/l	116	124	69-129	7	30
MCPP	50	U	50.	200	ug/l	96	104	66-132	8	30
2,4,5-T	0.015	U	0.015	0.050	ug/l	112	112	53-141	0	30
2,4,5-TP	0.010	U	0.010	0.050	ug/l	108	116	56-135	7	30
Batch number: 103620013A	Sample number(s): 6169016,6169019-6169023									
2,4-D	1.2	U	1.2	3.6	ug/kg	109		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	30		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	99		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	88		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	6*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	118		60-141		
MCPA	76	U	76.	250	ug/kg	89		34-113		
MCPP (Mecoprop)	75	U	75.	250	ug/kg	87		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	107		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	90		48-138		
Batch number: 103550011A	Sample number(s): 6169017-6169018									
Aldrin	0.0020	U	0.0020	0.010	ug/l	101	101	54-159	0	30
Alpha BHC	0.0030	U	0.0030	0.010	ug/l	122	122	59-146	0	30
Beta BHC	0.0029	U	0.0029	0.010	ug/l	98	103	73-147	5	30
Gamma BHC - Lindane	0.0020	U	0.0020	0.010	ug/l	89	96	68-128	8	30
Chlordane	0.12	U	0.12	0.50	ug/l					
p,p-DDD	0.0050	U	0.0050	0.020	ug/l	90	105	71-139	15	30
p,p-DDE	0.0050	U	0.0050	0.020	ug/l	105	116	66-130	10	30
p,p-DDT	0.0050	U	0.0050	0.020	ug/l	100	85	53-126	16	30
Delta BHC	0.0029	U	0.0029	0.010	ug/l	97	103	76-148	6	30
Dieldrin	0.0053	U	0.0053	0.020	ug/l	100	105	76-132	5	30
Endosulfan I	0.0043	U	0.0043	0.010	ug/l	79	89	68-128	12	30
Endosulfan II	0.015	U	0.015	0.020	ug/l	85	95	59-144	11	30
Endosulfan Sulfate	0.0058	U	0.0058	0.020	ug/l	85	105	71-142	21	30
Endrin	0.0081	U	0.0081	0.020	ug/l	75	90	52-132	18	30
Endrin Aldehyde	0.020	U	0.020	0.10	ug/l	95	105	68-139	10	20
Endrin Ketone	0.0050	U	0.0050	0.020	ug/l	95	105	69-146	10	30
Heptachlor	0.0026	U	0.0026	0.010	ug/l	92	97	57-126	5	30
Heptachlor Epoxide	0.0023	U	0.0023	0.010	ug/l	95	102	73-156	7	30
Methoxychlor	0.030	U	0.030	0.10	ug/l	75	91	52-133	19	30
Mirex	0.085	U	0.085	0.25	ug/l					
Toxaphene	1.0	U	1.0	3.0	ug/l					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 103550012A	Sample number(s): 6169017-6169018									
Aroclor 5432	0.10	U	0.10	0.50	ug/l					
Aroclor 5442	0.10	U	0.10	0.50	ug/l	44*	44*	75-125	0	30
Aroclor 5460	0.10	U	0.10	0.50	ug/l					
PCB-1016	0.10	U	0.10	0.50	ug/l	98	96	68-119	2	30
PCB-1221	0.10	U	0.10	0.50	ug/l					
PCB-1232	0.20	U	0.20	0.50	ug/l					
PCB-1242	0.10	U	0.10	0.50	ug/l					
PCB-1248	0.10	U	0.10	0.50	ug/l					
PCB-1254	0.10	U	0.10	0.50	ug/l					
PCB-1260	0.10	U	0.10	0.50	ug/l	92	96	68-121	4	30
PCB-1262	0.20	U	0.20	0.50	ug/l					
PCB-1268	0.16	U	0.16	0.50	ug/l					
Batch number: 103610029A	Sample number(s): 6169016,6169019-6169023									
Aldrin	0.066	U	0.066	0.17	ug/kg	100		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	67		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	78		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	70		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	76		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	114		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	72		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	75		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	80		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	76		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	92		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	92		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	74		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	68		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	85		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	76		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	100		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	74		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					
Batch number: 103610033A	Sample number(s): 6169016,6169019-6169029									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	68*	71*	75-125	4	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	103		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	126		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 103620026A	Sample number(s): 6169024-6169029									
EFH (C12-C14)	0.40	U	0.40	1.2	mg/kg	86		66-113		
EFH (C15-C20)	0.40	U	0.40	1.2	mg/kg	90		66-113		
EFH (C21-C30)	0.40	U	0.40	1.2	mg/kg	91		66-113		
EFH (C30 - C40)	0.40	U	0.40	1.2	mg/kg	88		66-113		
EFH (C8-C11)	0.40	U	0.40	1.2	mg/kg	73		66-113		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 103540003A	Sample number(s): 6169024-6169029								
Ethanol	100 U	100.	500	ug/kg	95		75-112		
Isopropanol	100 U	100.	500	ug/kg	95		75-125		
Methanol	100 U	100.	500	ug/kg	91		75-134		
Batch number: 103540008A	Sample number(s): 6169024-6169029								
Diethylene glycol	5.0 U	5.0	13	mg/kg	95		75-125		
Ethylene glycol	5.0 U	5.0	13	mg/kg	97		75-125		
Propylene glycol	5.0 U	5.0	13	mg/kg	90		75-125		
Batch number: 103550028A	Sample number(s): 6169024-6169029								
m-Terphenyl	1.5 U	1.5	3.5	mg/kg	99		75-125		
o-Terphenyl	1.5 U	1.5	3.5	mg/kg	104		75-125		
p-Terphenyl	1.5 U	1.5	3.5	mg/kg	99		75-125		
Batch number: 103545713001	Sample number(s): 6169017-6169018								
Mercury	0.000050 U	0.00005 0	0.00020	mg/l	97		80-120		
Batch number: 103551848003	Sample number(s): 6169017-6169018								
Aluminum	0.0834 U	0.0834	0.200	mg/l	96	92	90-112	4	20
Boron	0.0138 U	0.0138	0.0500	mg/l	97	94	90-110	3	20
Calcium	0.0960 J	0.0702	0.200	mg/l	102	99	90-112	3	20
Iron	0.0522 U	0.0522	0.200	mg/l	102	98	90-112	4	20
Lithium	0.0024 U	0.0024	0.0200	mg/l	100	98	80-120	2	20
Magnesium	0.0421 J	0.0172	0.100	mg/l	101	98	89-110	3	20
Manganese	0.00084 U	0.00084	0.0050	mg/l	103	101	90-110	3	20
Phosphorus	0.0089 U	0.0089	0.100	mg/l	104	102	80-120	2	20
Potassium	0.239 U	0.239	0.500	mg/l	100	99	85-115	2	20
Sodium	0.433 U	0.433	1.00	mg/l	100	100	87-114	0	20
Strontium	0.00089 U	0.00089	0.0050	mg/l	100	97	90-110	3	20
Tin	0.0098 U	0.0098	0.0200	mg/l	103	101	90-110	2	20
Titanium	0.0038 U	0.0038	0.0100	mg/l	105	102	90-113	3	20
Zirconium	0.0206 U	0.0206	0.0500	mg/l	101	99	80-120	3	20
Batch number: 103556050002A	Sample number(s): 6169017-6169018								
Antimony	0.00030 U	0.00030	0.0010	mg/l	105	110	87-110	5	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	99	106	86-111	7	20
Beryllium	0.00013 U	0.00013	0.00050	mg/l	108	103	90-112	5	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	105	110	90-114	5	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	98	102	90-118	4	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	101	104	80-120	3	20
Copper	0.00038 U	0.00038	0.0020	mg/l	104	104	90-113	0	20
Lead	0.000052 U	0.00005 2	0.0010	mg/l	105	107	90-115	2	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	107	109	90-113	2	20
Silver	0.000080 U	0.00008 0	0.00050	mg/l	107	108	90-115	2	20
Thallium	0.00015 U	0.00015	0.00050	mg/l	101	101	89-116	0	20
Vanadium	0.00016 U	0.00016	0.00050	mg/l	104	108	80-120	4	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	109	105	80-120	4	20
Batch number: 103556050002B	Sample number(s): 6169017-6169018								
Selenium	0.00025 U	0.00025	0.0020	mg/l	107	107	85-114	0	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 103556050002C	Sample number(s): 6169017-6169018								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	106	103	80-120	2	20
Batch number: 103556050002D	Sample number(s): 6169017-6169018								
Barium	0.00038 U	0.00038	0.0020	mg/l	107	106	88-113	1	20
Batch number: 103571026002A	Sample number(s): 6169016,6169019-6169029								
Antimony	0.0577 U	0.0577	0.192	mg/kg	63		11-208		
Arsenic	0.0577 U	0.0577	0.385	mg/kg	97		80-120		
Beryllium	0.0154 U	0.0154	0.0962	mg/kg	98		82-118		
Cadmium	0.0346 U	0.0346	0.0962	mg/kg	99		82-118		
Chromium	0.115 U	0.115	0.385	mg/kg	103		80-120		
Cobalt	0.0192 U	0.0192	0.0962	mg/kg	99		82-118		
Copper	0.203 J	0.0635	0.385	mg/kg	99		80-120		
Lead	0.0114 J	0.0100	0.192	mg/kg	98		80-120		
Nickel	0.121 J	0.0962	0.385	mg/kg	105		80-120		
Silver	0.0115 U	0.0115	0.0962	mg/kg	100		66-134		
Thallium	0.0288 U	0.0288	0.0962	mg/kg	101		81-119		
Vanadium	0.0212 U	0.0212	0.0962	mg/kg	94		90-110		
Zinc	0.601 J	0.538	2.88	mg/kg	101		78-122		
Batch number: 103571026002B	Sample number(s): 6169016,6169019-6169029								
Selenium	0.0385 U	0.0385	0.385	mg/kg	97		79-122		
Batch number: 103571026002C	Sample number(s): 6169016,6169019-6169029								
Molybdenum	0.0481 U	0.0481	0.0962	mg/kg	103		78-122		
Batch number: 103571026002D	Sample number(s): 6169016,6169019-6169029								
Barium	0.104 U	0.104	0.385	mg/kg	106		79-121		
Batch number: 103575708005	Sample number(s): 6169016,6169019-6169029								
Aluminum	16.5 J	4.98	19.8	mg/kg	95		61-110		
Boron	0.881 U	0.881	4.95	mg/kg	90		78-110		
Calcium	13.9 J	6.07	19.8	mg/kg	98		88-110		
Iron	6.65 J	4.66	19.8	mg/kg	86		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	100		80-120		
Magnesium	2.51 U	2.51	9.90	mg/kg	97		82-110		
Manganese	0.0772 U	0.0772	0.495	mg/kg	98		81-119		
Phosphorus	1.41 J	0.554	9.90	mg/kg	100		80-120		
Potassium	17.8 U	17.8	49.5	mg/kg	98		78-110		
Sodium	36.9 U	36.9	99.0	mg/kg	98		87-110		
Strontium	0.0782 J	0.0614	0.495	mg/kg	98		79-121		
Tin	1.13 J	0.990	9.90	mg/kg	96		90-114		
Titanium	0.376 U	0.376	0.990	mg/kg	90		80-120		
Zirconium	0.832 U	0.832	4.95	mg/kg	100		80-120		
Batch number: 103575711006	Sample number(s): 6169016,6169019-6169029								
Mercury	0.0027 U	0.0027	0.0934	mg/kg	110		88-123		
Batch number: 10352196301A	Sample number(s): 6169017-6169018								
3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	104	106	90-110	2	20
Batch number: 10355196901A	Sample number(s): 6169017-6169018								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	94	94	90-110	0	20
Batch number: 10363658701A	Sample number(s): 6169017-6169018								
7b Perchlorate EPA 314.0	0.70 U	0.70	2.0	ug/l	93	96	85-115	3	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10364102201A	Sample number(s): 6169024-6169028									
21a Cyanide by 9012B	0.18	U	0.18	0.50	mg/kg	105		80-120		
Batch number: 10364102201B	Sample number(s): 6169029									
21a Cyanide by 9012B	0.18	U	0.18	0.50	mg/kg	105		80-120		
Batch number: 11010010202A	Sample number(s): 6169016,6169019-6169027									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	107		90-110		
11a Anions by 300.0 - Nitrate	0.80	U	0.80	1.5	mg/kg	104		90-110		
Batch number: 11010010202B	Sample number(s): 6169028-6169029									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	107		90-110		
11a Anions by 300.0 - Nitrate	0.80	U	0.80	1.5	mg/kg	104		90-110		
Batch number: 11010010203A	Sample number(s): 6169016,6169019-6169027									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	95		85-115		
Batch number: 11010010203B	Sample number(s): 6169028-6169029									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	95		85-115		
Batch number: 11016243202A	Sample number(s): 6169016,6169019-6169029									
3a Cr VI by EPA 7199	0.20	U	0.20	1.0	mg/kg	99		80-120		
Batch number: 10355039402B	Sample number(s): 6169016,6169019-6169026									
22a pH by 9045C						100		95-105		
Batch number: 10355039403A	Sample number(s): 6169027-6169029									
22a pH by 9045C						100		95-105		
Batch number: 10355182102B	Sample number(s): 6169016,6169019-6169026									
Oxidation Reduction Potential						100		98-102		
Batch number: 10355182103A	Sample number(s): 6169027-6169029									
Oxidation Reduction Potential						100		98-102		
Batch number: 10354162401B	Sample number(s): 6169016,6169019-6169023									
28a Moisture Content by 160.3						100		80-120		
Batch number: 11011162401A	Sample number(s): 6169024-6169029									
28a Moisture Content by 160.3						100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B103543AA	Sample number(s): 6169024-6169029 UNSPK: P167517								
Acetone	117		15-210						
Benzene	114		55-143						
Bromobenzene	102		43-139						
Bromochloromethane	105		60-137						
Bromodichloromethane	103		53-136						

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Bromoform	90		38-124						
Bromomethane	85		42-168						
2-Butanone	101		37-163						
n-Butylbenzene	107		30-146						
sec-Butylbenzene	111		33-157						
tert-Butylbenzene	108		41-152						
Carbon Tetrachloride	116		45-153						
Chlorobenzene	107		49-135						
Chloroethane	90		39-152						
2-Chloroethyl Vinyl Ether	97		32-139						
Chloroform	112		61-142						
Chloromethane	101		51-163						
2-Chlorotoluene	108		42-146						
4-Chlorotoluene	108		39-145						
1,2-Dibromo-3-chloropropane	81		30-139						
Dibromochloromethane	100		51-128						
1,2-Dibromoethane	98		54-129						
Dibromomethane	104		57-130						
1,2-Dichlorobenzene	97		36-133						
1,3-Dichlorobenzene	98		34-134						
1,4-Dichlorobenzene	98		35-136						
Dichlorodifluoromethane	91		26-151						
1,1-Dichloroethane	114		63-142						
1,2-Dichloroethane	107		68-131						
1,1-Dichloroethene	118		61-149						
cis-1,2-Dichloroethene	113		60-136						
trans-1,2-Dichloroethene	115		59-142						
1,2-Dichloropropane	109		62-135						
1,3-Dichloropropane	103		58-129						
2,2-Dichloropropane	109		53-147						
1,1-Dichloropropene	115		54-145						
cis-1,3-Dichloropropene	97		51-131						
trans-1,3-Dichloropropene	95		49-129						
Ethylbenzene	110		44-141						
Freon 113	120		56-156						
Hexachlorobutadiene	75		10-155						
2-Hexanone	70		32-160						
Isopropylbenzene	109		38-144						
p-Isopropyltoluene	109		29-152						
Methyl Tertiary Butyl Ether	97		55-129						
4-Methyl-2-pentanone	71		46-139						
Methylene Chloride	105		61-141						
n-Propylbenzene	117		39-157						
Styrene	103		35-134						
1,1,1,2-Tetrachloroethane	107		52-130						
1,1,2,2-Tetrachloroethane	100		40-152						
Tetrachloroethene	109		42-149						
Toluene	111		50-146						
1,2,3-Trichlorobenzene	65		10-140						
1,2,4-Trichlorobenzene	69		10-136						
1,1,1-Trichloroethane	110		64-142						
1,1,2-Trichloroethane	102		54-139						
Trichloroethene	110		53-144						

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Trichlorofluoromethane	101		47-163						
1,2,3-Trichloropropane	96		45-154						
1,2,4-Trimethylbenzene	109		37-149						
1,3,5-Trimethylbenzene	111		38-150						
Vinyl Chloride	100		50-154						
m+p-Xylene	110		44-137						
o-Xylene	105		42-137						
Batch number: E103541AA	Sample number(s): 6169030 UNSPK: P169422								
1,4-Dioxane	96		50-150						
Batch number: E103571AA	Sample number(s): 6169024-6169029 UNSPK: P172090								
1,4-Dioxane	86	89	70-130	6	30				
Batch number: 10362SLF026	Sample number(s): 6169016,6169019-6169029 UNSPK: P172038								
Aniline	59	68	14-114	15	30				
Benzidine	35	19*	35-141	57*	30				
Benzoic acid	93	95	10-173	2	30				
Benzyl alcohol	86	89	55-123	4	30				
4-Bromophenyl-phenylether	90	92	67-129	3	30				
Carbazole	92	95	64-120	3	30				
4-Chloro-3-methylphenol	90	91	53-130	1	30				
4-Chloroaniline	74	80	23-95	9	30				
bis(2-Chloroethoxy)methane	93	96	54-117	3	30				
bis(2-Chloroethyl)ether	84	84	60-116	0	30				
bis(2-Chloroisopropyl)ether	86	87	55-142	1	30				
2-Chloronaphthalene	78	89	50-141	12	30				
2-Chlorophenol	90	94	73-121	5	30				
4-Chlorophenyl-phenylether	89	96	64-119	7	30				
Dibenzofuran	89	95	71-112	7	30				
1,2-Dichlorobenzene	87	89	66-108	2	30				
1,3-Dichlorobenzene	85	87	63-109	3	30				
1,4-Dichlorobenzene	86	88	53-113	3	30				
3,3'-Dichlorobenzidine	77	84	25-123	10	30				
2,4-Dichlorophenol	90	96	78-117	6	30				
2,4-Dimethylphenol	91	94	56-130	4	30				
3,5-Dimethylphenol	101	104	70-130	3	30				
4,6-Dinitro-2-methylphenol	78	76	10-148	3	30				
2,4-Dinitrophenol	68	66	20-143	3	30				
2,4-Dinitrotoluene	93	98	57-114	6	30				
2,6-Dinitrotoluene	91	97	69-123	6	30				
1,2-Diphenylhydrazine	99	101	71-129	2	30				
Hexachlorobenzene	94	96	61-111	2	30				
Hexachlorobutadiene	98	101	62-120	4	30				
Hexachlorocyclopentadiene	79	85	10-153	7	30				
Hexachloroethane	91	94	57-109	4	30				
Isophorone	87	92	51-118	5	30				
2-Methylphenol	87	90	47-142	4	30				
4-Methylphenol	84	89	55-126	5	30				
2-Nitroaniline	102	109	67-125	7	30				
3-Nitroaniline	91	96	59-122	6	30				
4-Nitroaniline	75	91	52-112	20	30				
Nitrobenzene	97	97	51-114	0	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2-Nitrophenol	93	94	74-115	1	30				
4-Nitrophenol	99	106	39-133	7	30				
N-Nitroso-di-n-propylamine	86	90	60-116	4	30				
N-Nitrosodiphenylamine	93	97	86-145	4	30				
Pentachlorophenol	79	80	17-149	1	30				
Phenol	86	93	58-126	8	30				
1,2,4-Trichlorobenzene	89	96	72-115	7	30				
2,4,5-Trichlorophenol	97	102	34-139	5	30				
2,4,6-Trichlorophenol	100	107	49-140	7	30				
Batch number: 10362SLK026	Sample number(s): 6169016,6169019-6169029 UNSPK: P172038								
Acenaphthene	97	96	63-105	1	30				
Acenaphthylene	93	98	55-126	5	30				
Anthracene	98	94	46-136	4	30				
Benzo(a)anthracene	101	108	39-144	6	30				
Benzo(a)pyrene	95	98	34-156	3	30				
Benzo(b)fluoranthene	106	107	43-155	1	30				
Benzo(g,h,i)perylene	70	63	33-141	9	30				
Benzo(k)fluoranthene	98	106	42-144	8	30				
Butylbenzylphthalate	120	128	73-140	7	30				
Di-n-butylphthalate	111	111	78-160	0	30				
Chrysene	89	93	29-156	4	30				
Dibenz(a,h)anthracene	84	78	41-130	6	30				
Diethylphthalate	102	112	87-131	9	30				
Dimethylphthalate	102	112	74-118	9	30				
Bis(2-Ethylhexyl)phthalate	82	109	39-167	19	30				
Fluoranthene	97	100	26-166	3	30				
Fluorene	98	105	45-121	7	30				
Indeno(1,2,3-cd)pyrene	82	74	21-143	10	30				
1-Methylnaphthalene	94	93	72-123	1	30				
2-Methylnaphthalene	87	86	28-121	1	30				
Naphthalene	94	99	61-102	5	30				
N-Nitrosodimethylamine	101	23*	48-113	126*	30				
Di-n-octylphthalate	88	95	40-192	6	30				
Phenanthrene	93	96	12-165	3	30				
Pyrene	87	92	15-153	5	30				
Batch number: 10363SLG026	Sample number(s): 6169024-6169029 UNSPK: P172090								
N-Nitrosodimethylamine	69*	69*	70-130	0	30				
Batch number: 103630002A	Sample number(s): 6169024-6169029 UNSPK: P172090								
4-Amino-2,6-Dinitrotoluene	94	101	80-127	7	50				
2-Amino-4,6-Dinitrotoluene	93	99	80-137	6	50				
1,3-Dinitrobenzene	96	100	38-166	4	50				
2,4-Dinitrotoluene	93	98	80-131	5	50				
2,6-Dinitrotoluene	98	104	80-127	5	50				
HMX	80	87	63-128	8	50				
Nitrobenzene	100	102	80-125	2	50				
Nitroglycerin	83	89	80-120	6	50				
2-Nitrotoluene	101	105	80-122	4	50				
3-Nitrotoluene	101	105	72-119	3	50				
4-Nitrotoluene	100	104	80-125	4	50				
PETN	92	99	80-121	8	50				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
RDX	85	93	75-129	9	50				
Tetryl	99	109	55-174	10	50				
1,3,5-Trinitrobenzene	106	112	82-126	5	50				
2,4,6-Trinitrotoluene	95	100	82-130	6	50				
Batch number: 103560015A	Sample number(s): 6169024-6169029 UNSPK: P167517								
17a Formaldehyde by 8315A	92	94	80-120	1	50				
Batch number: 103620013A	Sample number(s): 6169016,6169019-6169023 UNSPK: 6169016								
2,4-D	101	106	28-161	5	35				
Dalapon	31	37	12-86	19	50				
2,4-DB	74	69	20-170	7	50				
Dicamba	145*	92	33-120	45	50				
Dinoseb	10	10	1-44	0	35				
2,4-DP (Dichlorprop)	187*	158*	55-141	17	50				
MCPA	126	127	31-184	1	50				
MCPP (Mecoprop)	76	80	16-174	5	50				
2,4,5-T	81	83	25-132	3	35				
2,4,5-TP	82	83	10-183	1	35				
Batch number: 103610029A	Sample number(s): 6169016,6169019-6169023 UNSPK: P167524								
Aldrin	79	70	16-126	12	50				
Alpha BHC	52	45	10-129	13	50				
Beta BHC	69	59	14-147	15	50				
Gamma BHC - Lindane	58	48	10-140	17	50				
p,p-DDD	55	67	16-163	20	50				
p,p-DDE	52	42	18-161	12	50				
p,p-DDT	-94*	2*	10-176	54*	50				
Delta BHC	66	59	23-140	10	50				
Dieldrin	58	56	19-154	3	50				
Endosulfan I	45	39	16-137	14	50				
Endosulfan II	52	49	28-154	4	50				
Endosulfan Sulfate	111	95	21-160	15	50				
Endrin	58	56	11-149	3	50				
Endrin Aldehyde	59	41	10-148	24	35				
Endrin Ketone	58	49	22-165	13	50				
Heptachlor	61	52	13-126	16	50				
Heptachlor Epoxide	70	67	13-157	4	50				
Methoxychlor	83	64	32-147	26	50				
Batch number: 103610033A	Sample number(s): 6169016,6169019-6169029 UNSPK: P172060								
PCB-1016	72	85	29-146	16	50				
PCB-1260	51	67	39-149	17	50				
Batch number: 103620026A	Sample number(s): 6169024-6169029 UNSPK: P172090								
EFH (C12-C14)	74	69	49-123	7	20				
EFH (C15-C20)	97	90	49-123	8	20				
EFH (C21-C30)	55	41*	49-123	11	20				
EFH (C30 - C40)	17*	-23*	49-123	29*	20				
EFH (C8-C11)	54	56	49-123	4	20				
Batch number: 103540003A	Sample number(s): 6169024-6169029 UNSPK: P167520								
Ethanol	80	81	24-143	1	20				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Isopropanol	79	82	75-125	3	20				
Methanol	89	89	45-136	1	20				
Batch number: 103540008A	Sample number(s): 6169024-6169029 UNSPK: P167517								
Diethylene glycol	12*	24*	59-109	69*	20				
Ethylene glycol	50*	67	63-107	28*	20				
Propylene glycol	47*	59*	63-107	23*	20				
Batch number: 103550028A	Sample number(s): 6169024-6169029 UNSPK: 6169024								
m-Terphenyl	96	95	75-125	1	20				
o-Terphenyl	105	102	75-125	3	20				
p-Terphenyl	99	95	75-125	5	20				
Batch number: 103571026002A	Sample number(s): 6169016,6169019-6169029 UNSPK: P172316 BKG: P172316								
Antimony	37*	45*	75-125	14	20	0.0932 J	0.0866 J	7 (1)	20
Arsenic	151*	199*	75-125	11	20	5.16	5.63	9	20
Beryllium	111	111	75-125	1	20	0.480	0.449	7 (1)	20
Cadmium	142*	135*	75-125	5	20	0.194	0.180	8 (1)	20
Chromium	150*	166*	75-125	4	20	17.0	16.9	1	20
Cobalt	118	122	75-125	2	20	4.92	5.20	5	20
Copper	126*	132*	75-125	2	20	7.26	7.63	5	20
Lead	164*	179*	75-125	3	20	8.38	8.14	3	20
Nickel	143*	143*	75-125	1	20	10.1	10.7	5	20
Silver	121	121	75-125	0	20	0.0239 J	0.0312 J	27* (1)	20
Thallium	123	124	75-125	0	20	0.247	0.260	5 (1)	20
Vanadium	185*	203*	75-125	3	20	35.5	35.5	0	20
Zinc	226 (2)	210 (2)	75-125	2	20	59.3	61.8	4	20
Batch number: 103571026002B	Sample number(s): 6169016,6169019-6169029 UNSPK: P172316 BKG: P172316								
Selenium	105	109	75-125	3	20	0.128 J	0.132 J	3 (1)	20
Batch number: 103571026002C	Sample number(s): 6169016,6169019-6169029 UNSPK: P172316 BKG: P172316								
Molybdenum	139*	140*	75-125	0	20	0.382	0.391	2 (1)	20
Batch number: 103571026002D	Sample number(s): 6169016,6169019-6169029 UNSPK: P172316 BKG: P172316								
Barium	306 (2)	253 (2)	75-125	5	20	86.9	85.9	1	20
Batch number: 103575708005	Sample number(s): 6169016,6169019-6169029 UNSPK: P172316 BKG: P172316								
Aluminum	726 (2)	535 (2)	75-125	3	20	12,200	11,600	5	20
Boron	94	92	84-115	2	20	3.89 J	3.90 J	0 (1)	20
Calcium	153 (2)	145 (2)	75-125	1	20	2,460	2,400	2	20
Iron	-881 (2)	-1536 (2)	75-125	4	20	18,500	16,900	9	20
Lithium	97	93	82-114	3	20	24.4	22.3	9	20
Magnesium	-20 (2)	-81 (2)	75-125	2	20	5,230	4,770	9	20
Manganese	49 (2)	40 (2)	75-125	1	20	277	251	10	20
Phosphorus	82 (2)	81 (2)	75-125	0	20	419	406	3	20
Potassium	95	89	75-125	1	20	3,290	3,050	8	20
Sodium	102	99	75-125	3	20	62.6 J	59.3 J	6 (1)	20
Strontium	97	94	75-115	2	20	11.4	11.8	4	20
Tin	88	86	80-110	2	20	1.76 J	1.64 J	7 (1)	20
Titanium	186 (2)	192 (2)	75-125	0	20	1,130	1,080	5	20
Zirconium	93	91	75-125	2	20	3.69 J	3.70 J	0 (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 103575711006	Sample number(s): 6169016,6169019-6169029 UNSPK: P172316 BKG: P172316								
Mercury	103	102	65-135	6	20	0.0027 U	0.0028 U	0 (1)	20
Batch number: 10364102201A	Sample number(s): 6169024-6169028 UNSPK: 6169028 BKG: 6169028								
21a Cyanide by 9012B	101		75-125			0.17 U	0.18 U	0 (1)	20
Batch number: 10364102201B	Sample number(s): 6169029 UNSPK: P172090 BKG: P172090								
21a Cyanide by 9012B	104		75-125			0.18 U	0.17 U	0 (1)	20
Batch number: 11010010202A	Sample number(s): 6169016,6169019-6169027 UNSPK: 6169019 BKG: 6169019								
11a Anions by 300.0 - Fluoride	96		80-120			0.96 J	0.92 J	4 (1)	20
11a Anions by 300.0 - Nitrate	110		80-120			7.3	6.3	15 (1)	20
Batch number: 11010010202B	Sample number(s): 6169028-6169029 UNSPK: 6169028 BKG: 6169028								
11a Anions by 300.0 - Fluoride	64*		80-120			5.6	4.7	17 (1)	20
11a Anions by 300.0 - Nitrate	92		80-120			0.95 J	1.1 J	17 (1)	20
Batch number: 11010010203A	Sample number(s): 6169016,6169019-6169027 UNSPK: 6169019 BKG: 6169019								
7a Perchlorate EPA 314.0	105		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11010010203B	Sample number(s): 6169028-6169029 UNSPK: 6169028 BKG: 6169028								
7a Perchlorate EPA 314.0	104		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11016243202A	Sample number(s): 6169016,6169019-6169029 UNSPK: P172038 BKG: P172038								
3a Cr VI by EPA 7199	84		75-125			0.49 J	0.61 J	22* (1)	20
Batch number: 10355039402B	Sample number(s): 6169016,6169019-6169026 BKG: 6169019								
22a pH by 9045C						7.56	7.59	0	1
Batch number: 10355039403A	Sample number(s): 6169027-6169029 BKG: 6169029								
22a pH by 9045C						7.78	7.74	1	1
Batch number: 10355182102B	Sample number(s): 6169016,6169019-6169026 BKG: 6169019								
Oxidation Reduction Potential						515	511	1	6
Batch number: 10355182103A	Sample number(s): 6169027-6169029 BKG: 6169029								
Oxidation Reduction Potential						480	487	1	6
Batch number: 10354162401B	Sample number(s): 6169016,6169019-6169023 BKG: P158227								
28a Moisture Content by 160.3						12.4	12.9	3	20
Batch number: 11011162401A	Sample number(s): 6169024-6169029 BKG: P167523								
28a Moisture Content by 160.3						9.7	9.7	0	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Surrogate Quality Control

Analysis Name: 1a Volatile Organics EPA 8260B
Batch number: B103543AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6169024	103	102	99	90
6169025	104	99	98	92
6169026	105	104	97	93
6169027	104	101	97	89
6169028	103	100	98	92
6169029	106	107	97	93
Blank	102	99	98	93
LCS	99	102	100	100
LCSD	99	101	100	100
MS	100	100	103	97
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 14b 1,4-Dioxane by 8260B SIM
Batch number: E103541AA

	Toluene-d8
6169030	102
Blank	102
LCS	101
LCSD	101
MS	101
Limits:	80-120

Analysis Name: 14a 1,4-Dioxane by 8260B SIM
Batch number: E103571AA

	Toluene-d8
6169024	99
6169025	100
6169026	99
6169027	100
6169028	100
6169029	100
Blank	101
LCS	100
LCSD	100
MS	100
MSD	100
Limits:	70-130

Analysis Name: 1b Volatile Organics EPA8260
Batch number: Y103572AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6169030	106	99	106	103
Blank	104	100	106	103
LCS	106	101	107	104
LCSD	106	102	107	105
Limits:	86-118	80-120	88-110	86-115

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Surrogate Quality Control

Analysis Name: 4b Select SVOC EPA 8270SIM
Batch number: 10354WAI026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6169017	88	74	70
6169018	84	74	64
Blank	70	64	83
LCS	76	66	83
LCSD	78	65	84
Limits:	40-130	45-130	45-135

Analysis Name: 5b Semivolatiles by EPA 8270C
Batch number: 10354WAM026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6169017	64	45	100	85	75	83
6169018	62	44	81	85	79	82
Blank	63	43	86	85	80	83
LCS	59	40	89	85	84	79
LCSD	71	49	99	92	91	86
Limits:	20-130	20-120	30-130	40-130	45-130	45-135

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 10362SLF026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6169016	83	81	96	82	88	88
6169019	87	87	95	82	92	92
6169020	86	86	97	82	91	89
6169021	87	89	100	82	92	90
6169022	42	44	47	44	50	47
6169023	82	84	97	80	90	89
6169024	78	78	88	75	84	81
6169025	88	89	98	80	91	85
6169026	84	83	94	77	86	83
6169027	85	87	104	80	92	92
6169028	85	85	99	77	87	85
6169029	85	85	97	80	88	90
Blank	81	81	90	78	87	79
LCS	87	87	100	90	91	83
MS	83	82	99	87	87	90
MSD	90	90	107	92	95	88
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10362SLK026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6169016	99	84	88
6169019	96	86	90
6169020	99	87	92
6169021	98	87	93
6169022	101	87	94

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Surrogate Quality Control

6169023	96	83	91
6169024	98	87	97
6169025	97	83	95
6169026	93	81	94
6169027	96	88	87
6169028	93	84	87
6169029	93	85	87
Blank	92	82	94
LCS	95	83	97
MS	102	85	92
MSD	99	91	96
Limits:	40-130	45-130	45-135

Analysis Name: 19a NDMA by 1625C
Batch number: 10363SLG026

	N-Nitrosodimethylamine-d6
6169024	143
6169025	141
6169026	143
6169027	142
6169028	86
6169029	105
Blank	104
LCS	110
MS	152*
MSD	151*
Limits:	50-150

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 10354A34A

	Trifluorotoluene-F
6169024	91
6169025	89
6169026	85
6169027	81
6169028	92
6169029	81
Blank	90
LCS	91
LCSD	98
Limits:	61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12
Batch number: 10355B20A

	Trifluorotoluene-F
6169030	83
Blank	83
LCS	113
LCSD	110

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Surrogate Quality Control

Limits: 63-135

Analysis Name: 12b Pesticides by 8081A
Batch number: 103550011A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6169017	95	85
6169018	100	98
Blank	90	92
LCS	96	89
LCSD	99	101
Limits:	52-141	40-144

Analysis Name: 8b PCBs/PCTs by 8082
Batch number: 103550012A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6169017	114	96
6169018	111	100
Blank	117	85
LCS	110	75
LCSD	106	81
Limits:	30-150	45-120

Analysis Name: 17a Formaldehyde by 8315A
Batch number: 103560015A

	Butyraldehyde
6169024	103
6169025	104
6169026	112
6169027	110
6169028	106
6169029	103
Blank	106
LCS	95
MS	109
MSD	100
Limits:	64-126

Analysis Name: 13b Herbicides by EPA 8151
Batch number: 103560021A

	2,4-Dichlorophenylacetic acid
6169017	109
6169018	107
Blank	116
LCS	126
LCSD	132
Limits:	35-144

Analysis Name: 12a Pesticides by 8081A

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Surrogate Quality Control

Batch number: 103610029A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6169016	67	227*
6169019	72	92
6169020	64	76
6169021	47*	36
6169022	62	80
6169023	11*	0*
Blank	68	76
LCS	68	82
MS	60	84
MSD	53	46
Limits:	50-130	20-120

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 103610033A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6169016	96	116
6169019	89	113
6169020	99	136*
6169021	94	119
6169022	115	150*
6169023	93	113
6169024	98	136*
6169025	91	103
6169026	72	85
6169027	84	100
6169028	84	97
6169029	106	126*
Blank	97	119
LCS	101	123*
LCSD	106	121*
MS	65	63
MSD	78	74
Limits:	53-139	45-120

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 103620013A

	2,4-Dichlorophenylacetic acid
6169016	76
6169019	103
6169020	108
6169021	107
6169022	111
6169023	104
Blank	87
LCS	95
MS	73
MSD	76
Limits:	36-156

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Surrogate Quality Control

Analysis Name: 20a Energetics by 8330A
Batch number: 103630002A

	2-Nitro-m-xylene
6169024	117
6169025	107
6169026	117
6169027	105
6169028	103
6169029	117
Blank	114
LCS	124
LCSD	114
MS	111
MSD	117
Limits:	80-146

Analysis Name: 25a Alcohols by 8015B
Batch number: 103540003A

	Acetone
6169024	87
6169025	84
6169026	77
6169027	79
6169028	75
6169029	84
Blank	95
LCS	96
MS	84
MSD	85
Limits:	42-138

Analysis Name: 27a Glycols by 8015B
Batch number: 103540008A

	Tetramethylene glycol
6169024	86
6169025	52
6169026	85
6169027	37*
6169028	85
6169029	27*
Blank	102
LCS	102
MS	52
MSD	54
Limits:	50-119

Analysis Name: 26a Terphenyls by 8015B
Batch number: 103550028A

	n-Triacontane-d62

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226239
Reported: 01/27/11 at 12:46 PM

Surrogate Quality Control

6169024	86
6169025	95
6169026	92
6169027	93
6169028	96
6169029	96
Blank	97
LCS	94
MS	86
MSD	84
Limits:	50-150

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 103620026A

	Chlorobenzene	Orthoterphenyl
6169024	73	81
6169025	71	75
6169026	68	75
6169027	61	73
6169028	73	80
6169029	56	78
Blank	75	85
LCS	79	88
MS	76	84
MSD	75	84
Limits:	37-125	47-145

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

acct# 13013 Cap# 1226239 sample# 61690016-30

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-EFH EPA 8015B Mod.	*Metals EPA 6010/6020/6/7471A	*Hex Chrome EPA 7196*	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
DUP08-SA5B-QC-121710	12.17.10	1407	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									surface soil DUP
EB05-SA5B-121710	12.17.10	1235	water	none	6-1 liter ambers			X						X	X			X	X									surface tool rinsate
EB05-SA5B-121710	12.17.10	1235	water	none	1-500 ml poly							X	X			X												surface tool rinsate
EB05-SA5B-121710	12.17.10	1235	water	HNO3	1-500 ml poly						X																	surface tool rinsate
EB01-SIV-121710	12.17.10	1235	water	none	6-1 liter ambers			X						X	X			X	X									sediment tool rinsate
EB01-SIV-121710	12.17.10	1235	water	none	1-500 ml poly							X	X			X												sediment tool rinsate
EB01-SIV-121710	12.17.10	1235	water	HNO3	1-500 ml poly						X																	sediment tool rinsate
SED-014-SIV-SD-0.0-0.5	12.17.10	0844	soil	none	1 x 16 oz. jars & 1 6" sleeves			X			X	X	X	X	X	X		X	X									
SED-012-SIV-SD-0.0-0.5	12.17.10	1024	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SED-006-SIV-SD-0.0-0.5	12.17.10	1525	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SED-001-SIV-SD-0.0-0.5	12.17.10	1241	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SED-004-SIV-SD-0.0-0.5	12.17.10	1142	soil	none	1 x 16 oz. jars & 1 6" sleeves			X			X	X	X	X	X	X		X	X									
SL-282-SA5B-SB-4.0-5.0	12.17.10	1020	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	
SL-282-SA5B-SB-4.5	12.17.10	1015	soil	none	5 Encore Samplers	X	X		X																			
SL-282-SA5B-SB-7.5	12.17.10	1024	soil	none	5 Encore Samplers	X	X		X																			
SL-282-SA5B-SB-7.0-8.0	12.17.10	1028	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	
SL-281-SA5B-SB-4.0-5.0	12.17.10	1230	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	
SL-281-SA5B-SB-4.5	12.17.10	1225	soil	none	5 Encore Samplers	X	X		X																			
SL-281-SA5B-SB-8.0-9.0	12.17.10	1237	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	
SL-281-SA5B-SB-8.5	12.17.10	1233	soil	none	5 Encore Samplers	X	X		X																			
SL-026-SA5B-4.0-5.0	12.17.10	1508	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	
SL-026-SA5B-4.5	12.17.10	1503	soil	none	5 Encore Samplers	X	X		X																			
SL-026-SA5B-9.0-10	12.17.10	1519	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	
SL-026-SA5B-8.5	12.17.10	1513	soil	none	5 Encore Samplers	X	X		X																			
SL-207-SA5B-SS-0.0-0.5	12.17.10	1110	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-208-SA5B-SS-0.0-0.5	12.17.10	1053	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-276-SA5B-SS-0.0-0.5	12.17.10	0930	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-210-SA5B-SS-0.0-0.5	12.17.10	1128	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-275-SA5B-SS-0.0-0.5	12.17.10	0945	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-206-SA5B-SS-0.0-0.5	12.17.10	1010	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-209-SA5B-SS-0.0-0.5	12.17.10	1142	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X									
SL-161-SA5B-SS-0.0-0.5	12.17.10	1004	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-162-SA5B-SS-0.0-0.5	12.17.10	0942	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-274-SA5B-SS-0.0-0.5	12.17.10	1128	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-166-SA5B-SS-0.0-0.5	12.17.10	1108	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-160-SA5B-SS-0.0-0.5	12.17.10	1122	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-211-SA5B-SS-0.0-0.5MS	12.17.10	1402	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X									surface soil MS/MSD
SL-278-SA5B-SS-0.0-0.5	12.17.10	1411	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-279-SA5B-SS-0.0-0.5	12.17.10	1428	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-277-SA5B-SS-0.0-0.5	12.17.10	1355	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-273-SA5B-SS-0.0-0.5	12.17.10	1420	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X									
SL-272-SA5B-SS-0.0-0.5	12.17.10	1440	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
TB-121710	12.17.10	0800	water	HCl	4-40 mL clear VOA vials	X	X		X																			trip blank

Relinquished by: (Signature) Date/Time 12.17.10 | 1700 Received by: (Signature)

Received for Laboratory by: (Signature) Date/Time 12/18/10 1240

Airbill No. 00732992

Laboratory: Lancaster Laboratories, Inc.

No. of coolers = 5

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 24, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/18/2010
Group Number: 1226240
SDG: DX029
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
DUP08-SA5B-QC-121710 Soil	6169031
EB05-SA5B-121710 Water	6169032
EB01-SIV-121710 Water	6169033
SED-014-SIV-SD-0.0-0.5 Sediment	6169034
SED-012-SIV-SD-0.0-0.5 Sediment	6169035
SED-006-SIV-SD-0.0-0.5 Sediment	6169036
SED-001-SIV-SD-0.0-0.5 Sediment	6169037
SED-004-SIV-SD-0.0-0.5 Sediment	6169038
SL-282-SA5B-SB-4.0-5.0 Soil	6169039
SL-282-SA5B-SB-7.0-8.0 Soil	6169040
SL-281-SA5B-SB-4.0-5.0 Soil	6169041
SL-281-SA5B-SB-8.0-9.0 Soil	6169042
SL-026-SA5B-SB-4.0-5.0 Soil	6169043
SL-026-SA5B-SB-9.0-10 Soil	6169044

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	CDM Federal Services Program	Attn: Todd Burgesser
1 COPY TO	Data Package Group	

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169031
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2901 SDG#: DX029-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	10.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169031
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2901 SDG#: DX029-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	2.77	0.0933	1.12	1
11031	12378-PeCDD	40321-76-4	12.4 BQ	0.194	5.61	1
11031	123478-HxCDD	39227-28-6	23.6 B	0.145	5.61	1
11031	123678-HxCDD	57653-85-7	114 B	0.149	5.61	1
11031	123789-HxCDD	19408-74-3	41.9 B	0.143	5.61	1
11031	1234678-HpCDD	35822-46-9	2,720 EB	0.320	5.61	1
11031	OCDD	3268-87-9	26,800 EB	0.278	11.2	1
11031	2378-TCDF	51207-31-9	5.17	0.304	1.12	1
11650	2378-TCDF-Conf	51207-31-9	5.44 B	0.0863	1.12	1
11031	12378-PeCDF	57117-41-6	7.75 B	0.0822	5.61	1
11031	23478-PeCDF	57117-31-4	7.55 B	0.0860	5.61	1
11031	123478-HxCDF	70648-26-9	20.8 B	0.180	5.61	1
11031	123678-HxCDF	57117-44-9	22.8 B	0.163	5.61	1
11031	123789-HxCDF	72918-21-9	4.86 JB	0.198	5.61	1
11031	234678-HxCDF	60851-34-5	41.3 B	0.179	5.61	1
11031	1234678-HpCDF	67562-39-4	483 B	0.111	5.61	1
11031	1234789-HpCDF	55673-89-7	59.8 B	0.148	5.61	1
11031	OCDF	39001-02-0	1,130 B	0.106	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	85	25 - 164
13C12-2378-TCDF-Conf	70	24 - 169
13C12-12378-PeCDD	91	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	99	23 - 140
13C12-OCDD	108	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	91	24 - 185
13C12-23478-PeCDF	89	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	83	26 - 123

*=This limit was used in the evaluation of the final result

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169031
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2901 SDG#: DX029-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Labeled Compounds		%Rec	Windows			
13C12-234678-HxCDF		80	28 - 136			
13C12-123789-HxCDF		85	29 - 147			
13C12-1234678-HpCDF		94	28 - 143			
13C12-1234789-HpCDF		89	26 - 138			
13C12-OCDF		91	17 - 157			
13C12-1278-TCDD (CRS)		94	35 - 197			

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP08-SA5B-QC-121710 Soil
SSFL Area IV Collocated Soil Sampling
DUP08-SA5B-QC-121710

LLI Sample # SW 6169031
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 14:07

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2901 SDG#: DX029-01FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 00:21	Nelson H Risser	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	11012001	02/06/2011 14:01	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB05-SA5B-121710 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169032
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2902 SDG#: DX029-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	2.31	U	2.31	2.18	1
10915	12378-PeCDD	40321-76-4	0.462	U	0.462	10.9	1
10915	123478-HxCDD	39227-28-6	0.163	U	0.163	10.9	1
10915	123678-HxCDD	57653-85-7	0.166	U	0.166	10.9	1
10915	123789-HxCDD	19408-74-3	0.250	JBQ	0.179	10.9	1
10915	1234678-HpCDD	35822-46-9	0.726	JBQ	0.214	10.9	1
10915	OCDD	3268-87-9	1.35	JB	0.225	21.8	1
10915	2378-TCDF	51207-31-9	0.188	U	0.188	2.18	1
10915	12378-PeCDF	57117-41-6	0.220	JBQ	0.146	10.9	1
10915	23478-PeCDF	57117-31-4	0.732	JB	0.120	10.9	1
10915	123478-HxCDF	70648-26-9	0.379	JBQ	0.114	10.9	1
10915	123678-HxCDF	57117-44-9	0.332	JBQ	0.111	10.9	1
10915	123789-HxCDF	72918-21-9	0.355	JBQ	0.112	10.9	1
10915	234678-HxCDF	60851-34-5	0.344	JBQ	0.103	10.9	1
10915	1234678-HpCDF	67562-39-4	1.18	JBQ	0.0890	10.9	1
10915	1234789-HpCDF	55673-89-7	0.193	JBQ	0.103	10.9	1
10915	OCDF	39001-02-0	0.858	JBQ	0.233	21.8	1

The recoveries of several labeled compounds were outside QC limits in this sample and the blank and OPR associated with this sample. The sample was re-extracted outside the project specified holding time with all labeled compound recoveries within QC specification. Comparable native compound results were observed between the two extractions.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	4	25 - 164
13C12-12378-PeCDD	27	25 - 181
13C12-123478-HxCDD	45	32 - 141
13C12-123678-HxCDD	43	28 - 130
13C12-123789-HxCDD	40	28 - 130
13C12-1234678-HpCDD	52	23 - 140
13C12-OCDD	51	17 - 157
13C12-2378-TCDF	46	24 - 169
13C12-12378-PeCDF	52	24 - 185
13C12-23478-PeCDF	58	21 - 178
13C12-123478-HxCDF	49	26 - 152
13C12-123678-HxCDF	48	26 - 123
13C12-234678-HxCDF	52	28 - 136
13C12-123789-HxCDF	53	29 - 147
13C12-1234678-HpCDF	52	28 - 143
13C12-1234789-HpCDF	53	26 - 138
13C12-OCDF	49	17 - 157
13C12-1278-TCDD (CRS)	8	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **EB05-SA5B-121710 Water**
SSFL Area IV Collocated Soil Sampling
EB05-SA5B-121710

LLI Sample # WW 6169032
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2902 SDG#: DX029-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor

E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	10362001	12/30/2010 22:09	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	10362001	12/28/2010 06:30	Ginelle L Haines	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB01-SIV-121710 Water
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169033
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2903 SDG#: DX029-03EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.546	U	0.546	2.16	1
10915	12378-PeCDD	40321-76-4	0.529	JBQ	0.283	10.8	1
10915	123478-HxCDD	39227-28-6	0.137	U	0.137	10.8	1
10915	123678-HxCDD	57653-85-7	0.185	JBQ	0.144	10.8	1
10915	123789-HxCDD	19408-74-3	0.194	JBQ	0.146	10.8	1
10915	1234678-HpCDD	35822-46-9	1.91	JBQ	0.177	10.8	1
10915	OCDD	3268-87-9	13.7	JB	0.197	21.6	1
10915	2378-TCDF	51207-31-9	0.167	U	0.167	2.16	1
10915	12378-PeCDF	57117-41-6	0.139	JBQ	0.114	10.8	1
10915	23478-PeCDF	57117-31-4	0.626	JB	0.0958	10.8	1
10915	123478-HxCDF	70648-26-9	0.522	JB	0.113	10.8	1
10915	123678-HxCDF	57117-44-9	0.325	JBQ	0.107	10.8	1
10915	123789-HxCDF	72918-21-9	0.252	JBQ	0.108	10.8	1
10915	234678-HxCDF	60851-34-5	0.283	JBQ	0.101	10.8	1
10915	1234678-HpCDF	67562-39-4	1.69	JB	0.0843	10.8	1
10915	1234789-HpCDF	55673-89-7	0.377	JBQ	0.0955	10.8	1
10915	OCDF	39001-02-0	1.41	JBQ	0.198	21.6	1

The recoveries of several labeled compounds were outside QC limits in this sample and the blank and OPR associated with this sample. The sample was re-extracted outside the project specified holding time with all labeled compound recoveries within QC specification. Comparable native compound results were observed between the two extractions.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	16	25 - 164
13C12-12378-PeCDD	48	25 - 181
13C12-123478-HxCDD	59	32 - 141
13C12-123678-HxCDD	56	28 - 130
13C12-123789-HxCDD	56	28 - 130
13C12-1234678-HpCDD	64	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	52	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	60	26 - 123
13C12-234678-HxCDF	63	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	63	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	21	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **EB01-SIV-121710 Water**
SSFL Area IV Collocated Soil Sampling
EB01-SIV-121710

LLI Sample # WW 6169033
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:35

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2903 SDG#: DX029-03EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor

E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	10362001	12/30/2010 23:05	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	10362001	12/28/2010 06:30	Ginelle L Haines	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169034
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2904 SDG#: DX029-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	15.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169034
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2904 SDG#: DX029-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.217 J	0.0620	1.18	1
11031	12378-PeCDD	40321-76-4	2.80 JB	0.107	5.88	1
11031	123478-HxCDD	39227-28-6	8.92 B	0.140	5.88	1
11031	123678-HxCDD	57653-85-7	83.8 B	0.140	5.88	1
11031	123789-HxCDD	19408-74-3	14.7 B	0.141	5.88	1
11031	1234678-HpCDD	35822-46-9	4,430 EB	0.410	5.88	1
11031	OCDD	3268-87-9	49,800 EB	0.354	11.8	1
11031	2378-TCDF	51207-31-9	0.384 JQ	0.111	1.18	1
11031	12378-PeCDF	57117-41-6	0.711 JB	0.0765	5.88	1
11031	23478-PeCDF	57117-31-4	1.14 JB	0.0721	5.88	1
11031	123478-HxCDF	70648-26-9	18.1 B	0.202	5.88	1
11031	123678-HxCDF	57117-44-9	12.4 B	0.191	5.88	1
11031	123789-HxCDF	72918-21-9	2.86 JB	0.235	5.88	1
11031	234678-HxCDF	60851-34-5	12.9 B	0.200	5.88	1
11031	1234678-HpCDF	67562-39-4	455 B	0.176	5.88	1
11031	1234789-HpCDF	55673-89-7	85.3 B	0.219	5.88	1
11031	OCDF	39001-02-0	2,920 B	0.139	11.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	94	23 - 140
13C12-OCDD	104	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	77	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	77	28 - 136

*=This limit was used in the evaluation of the final result

Sample Description: SED-014-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169034
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2904 SDG#: DX029-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Labeled Compounds	%Rec	Windows
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	88	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-014-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-014-SIV-SD-0.0-0.5

LLI Sample # SW 6169034
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 08:44

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2904 SDG#: DX029-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 01:18	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169035
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2905 SDG#: DX029-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	5.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169035
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2905 SDG#: DX029-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0412	U	0.0412	1.06	1
11031	12378-PeCDD	40321-76-4	0.219	JBQ	0.0464	5.31	1
11031	123478-HxCDD	39227-28-6	0.226	JBQ	0.0497	5.31	1
11031	123678-HxCDD	57653-85-7	0.776	JB	0.0508	5.31	1
11031	123789-HxCDD	19408-74-3	0.401	JB	0.0518	5.31	1
11031	1234678-HpCDD	35822-46-9	15.8	B	0.0505	5.31	1
11031	OCDD	3268-87-9	153	B	0.0494	10.6	1
11031	2378-TCDF	51207-31-9	0.0670	U	0.0670	1.06	1
11031	12378-PeCDF	57117-41-6	0.152	JBQ	0.0305	5.31	1
11031	23478-PeCDF	57117-31-4	0.266	JBQ	0.0251	5.31	1
11031	123478-HxCDF	70648-26-9	0.166	JBQ	0.0350	5.31	1
11031	123678-HxCDF	57117-44-9	0.177	JBQ	0.0299	5.31	1
11031	123789-HxCDF	72918-21-9	0.0960	JB	0.0369	5.31	1
11031	234678-HxCDF	60851-34-5	0.226	JBQ	0.0338	5.31	1
11031	1234678-HpCDF	67562-39-4	2.37	JB	0.0340	5.31	1
11031	1234789-HpCDF	55673-89-7	0.213	JB	0.0454	5.31	1
11031	OCDF	39001-02-0	5.17	JB	0.0334	10.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	85	32 - 141
13C12-123678-HxCDD	89	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	89	28 - 143
13C12-1234789-HpCDF	88	26 - 138
13C12-OCDF	86	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-012-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169035
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2905 SDG#: DX029-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-012-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-012-SIV-SD-0.0-0.5

LLI Sample # SW 6169035
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:24

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2905 SDG#: DX029-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	02/07/2011 21:56	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169036
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2906 SDG#: DX029-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	19.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169036
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2906 SDG#: DX029-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0794	JQ	0.0486	1.25	1
11031	12378-PeCDD	40321-76-4	0.0831	U	0.0831	6.24	1
11031	123478-HxCDD	39227-28-6	0.375	JB	0.0876	6.24	1
11031	123678-HxCDD	57653-85-7	1.69	JB	0.0875	6.24	1
11031	123789-HxCDD	19408-74-3	1.51	JB	0.0883	6.24	1
11031	1234678-HpCDD	35822-46-9	29.0	B	0.0773	6.24	1
11031	OCDD	3268-87-9	259	B	0.0858	12.5	1
11031	2378-TCDF	51207-31-9	1.10	J	0.147	1.25	1
11031	12378-PeCDF	57117-41-6	1.38	JB	0.0592	6.24	1
11031	23478-PeCDF	57117-31-4	1.28	JB	0.0603	6.24	1
11031	123478-HxCDF	70648-26-9	0.544	JB	0.0714	6.24	1
11031	123678-HxCDF	57117-44-9	0.594	JB	0.0659	6.24	1
11031	123789-HxCDF	72918-21-9	1.03	JB	0.0748	6.24	1
11031	234678-HxCDF	60851-34-5	0.615	JB	0.0695	6.24	1
11031	1234678-HpCDF	67562-39-4	4.64	JB	0.0543	6.24	1
11031	1234789-HpCDF	55673-89-7	0.395	JBQ	0.0760	6.24	1
11031	OCDF	39001-02-0	9.52	JB	0.0597	12.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	86	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	83	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-006-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169036
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2906 SDG#: DX029-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-006-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-006-SIV-SD-0.0-0.5

LLI Sample # SW 6169036
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:25

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2906 SDG#: DX029-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 06:14	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169037
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2907 SDG#: DX029-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	12.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169037
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2907 SDG#: DX029-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0787	J	0.0567	1.14	1
11031	12378-PeCDD	40321-76-4	0.0919	U	0.0919	5.69	1
11031	123478-HxCDD	39227-28-6	0.500	JB	0.0714	5.69	1
11031	123678-HxCDD	57653-85-7	1.56	JB	0.0747	5.69	1
11031	123789-HxCDD	19408-74-3	1.21	JB	0.0709	5.69	1
11031	1234678-HpCDD	35822-46-9	27.7	B	0.0706	5.69	1
11031	OCDD	3268-87-9	236	B	0.0587	11.4	1
11031	2378-TCDF	51207-31-9	1.74		0.154	1.14	1
11650	2378-TCDF-Conf	51207-31-9	1.76	B	0.0584	1.14	1
11031	12378-PeCDF	57117-41-6	11.7	B	0.0613	5.69	1
11031	23478-PeCDF	57117-31-4	1.66	JB	0.0580	5.69	1
11031	123478-HxCDF	70648-26-9	1.12	JB	0.0610	5.69	1
11031	123678-HxCDF	57117-44-9	1.03	JB	0.0576	5.69	1
11031	123789-HxCDF	72918-21-9	0.563	JB	0.0625	5.69	1
11031	234678-HxCDF	60851-34-5	0.673	JB	0.0596	5.69	1
11031	1234678-HpCDF	67562-39-4	4.60	JB	0.0356	5.69	1
11031	1234789-HpCDF	55673-89-7	0.421	JBQ	0.0485	5.69	1
11031	OCDF	39001-02-0	4.93	JB	0.0487	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-2378-TCDF-Conf	71	24 - 169
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	76	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	80	17 - 157
13C12-1278-TCDD (CRS)	91	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169037
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2907 SDG#: DX029-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-001-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-001-SIV-SD-0.0-0.5

LLI Sample # SW 6169037
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:41

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2907 SDG#: DX029-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 07:11	Nelson H Risser	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	11012001	02/06/2011 15:07	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169038
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2908 SDG#: DX029-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	19.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169038
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2908 SDG#: DX029-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0360	U	0.0360	1.24	1
11031	12378-PeCDD	40321-76-4	0.209	JBQ	0.0458	6.19	1
11031	123478-HxCDD	39227-28-6	0.231	JB	0.0691	6.19	1
11031	123678-HxCDD	57653-85-7	0.850	JB	0.0715	6.19	1
11031	123789-HxCDD	19408-74-3	0.590	JB	0.0725	6.19	1
11031	1234678-HpCDD	35822-46-9	21.9	B	0.0610	6.19	1
11031	OCDD	3268-87-9	240	B	0.0682	12.4	1
11031	2378-TCDF	51207-31-9	0.0552	U	0.0552	1.24	1
11031	12378-PeCDF	57117-41-6	0.480	JB	0.0295	6.19	1
11031	23478-PeCDF	57117-31-4	0.283	JB	0.0295	6.19	1
11031	123478-HxCDF	70648-26-9	0.525	JB	0.0557	6.19	1
11031	123678-HxCDF	57117-44-9	0.521	JB	0.0485	6.19	1
11031	123789-HxCDF	72918-21-9	0.224	JB	0.0624	6.19	1
11031	234678-HxCDF	60851-34-5	0.660	JB	0.0548	6.19	1
11031	1234678-HpCDF	67562-39-4	17.4	B	0.0458	6.19	1
11031	1234789-HpCDF	55673-89-7	0.825	JB	0.0632	6.19	1
11031	OCDF	39001-02-0	52.6	B	0.0569	12.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	71	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-004-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169038
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2908 SDG#: DX029-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-004-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-004-SIV-SD-0.0-0.5

LLI Sample # SW 6169038
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 11:42

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2908 SDG#: DX029-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 08:08	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	10354162401B	12/20/2010 16:51	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169039
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2909 SDG#: DX029-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169039
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2909 SDG#: DX029-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0567 U	0.0567	1.09	1
11031	12378-PeCDD	40321-76-4	0.118 JBQ	0.0466	5.47	1
11031	123478-HxCDD	39227-28-6	0.0465 JBQ	0.0371	5.47	1
11031	123678-HxCDD	57653-85-7	0.144 JB	0.0374	5.47	1
11031	123789-HxCDD	19408-74-3	0.182 JBQ	0.0373	5.47	1
11031	1234678-HpCDD	35822-46-9	1.02 JB	0.0686	5.47	1
11031	OCDD	3268-87-9	13.4 B	0.0501	10.9	1
11031	2378-TCDF	51207-31-9	0.0693 JQ	0.0575	1.09	1
11031	12378-PeCDF	57117-41-6	0.125 JB	0.0292	5.47	1
11031	23478-PeCDF	57117-31-4	0.140 JBQ	0.0282	5.47	1
11031	123478-HxCDF	70648-26-9	0.144 JBQ	0.0359	5.47	1
11031	123678-HxCDF	57117-44-9	0.124 JBQ	0.0329	5.47	1
11031	123789-HxCDF	72918-21-9	0.263 JB	0.0397	5.47	1
11031	234678-HxCDF	60851-34-5	0.192 JBQ	0.0353	5.47	1
11031	1234678-HpCDF	67562-39-4	0.645 JB	0.0303	5.47	1
11031	1234789-HpCDF	55673-89-7	0.0727 JBQ	0.0385	5.47	1
11031	OCDF	39001-02-0	0.785 JB	0.0617	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	77	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	84	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	78	17 - 157
13C12-1278-TCDD (CRS)	89	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169039
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2909 SDG#: DX029-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-282-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-4.0-5.0

LLI Sample # SW 6169039
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:20

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2909 SDG#: DX029-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 09:04	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169040
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2910 SDG#: DX029-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169040
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2910 SDG#: DX029-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0503	U	0.0503	1.10	1
11031	12378-PeCDD	40321-76-4	0.0462	U	0.0462	5.48	1
11031	123478-HxCDD	39227-28-6	0.0353	JBQ	0.0318	5.48	1
11031	123678-HxCDD	57653-85-7	0.0973	JBQ	0.0345	5.48	1
11031	123789-HxCDD	19408-74-3	0.146	JBQ	0.0323	5.48	1
11031	1234678-HpCDD	35822-46-9	0.415	JB	0.0482	5.48	1
11031	OCDD	3268-87-9	1.60	JB	0.0475	11.0	1
11031	2378-TCDF	51207-31-9	0.0826	JQ	0.0508	1.10	1
11031	12378-PeCDF	57117-41-6	0.0757	JB	0.0255	5.48	1
11031	23478-PeCDF	57117-31-4	0.0842	JB	0.0244	5.48	1
11031	123478-HxCDF	70648-26-9	0.0919	JB	0.0283	5.48	1
11031	123678-HxCDF	57117-44-9	0.0951	JBQ	0.0254	5.48	1
11031	123789-HxCDF	72918-21-9	0.152	JBQ	0.0304	5.48	1
11031	234678-HxCDF	60851-34-5	0.142	JB	0.0280	5.48	1
11031	1234678-HpCDF	67562-39-4	0.469	JB	0.0237	5.48	1
11031	1234789-HpCDF	55673-89-7	0.0590	JB	0.0308	5.48	1
11031	OCDF	39001-02-0	0.331	JBQ	0.0484	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	88	25 - 181
13C12-123478-HxCDD	87	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	85	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	96	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	90	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	84	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	90	26 - 138
13C12-OCDF	89	17 - 157
13C12-1278-TCDD (CRS)	95	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-282-SA5B-SB-7.0-8.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169040
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2910 SDG#: DX029-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-282-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-282-SA5B-SB-7.0-8.0

LLI Sample # SW 6169040
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 10:28

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2910 SDG#: DX029-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 10:01	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169041
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2911 SDG#: DX029-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	16.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169041
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2911 SDG#: DX029-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0523	U	0.0523	1.19	1
11031	12378-PeCDD	40321-76-4	0.0484	U	0.0484	5.97	1
11031	123478-HxCDD	39227-28-6	0.0381	U	0.0381	5.97	1
11031	123678-HxCDD	57653-85-7	0.0948	JB	0.0387	5.97	1
11031	123789-HxCDD	19408-74-3	0.109	JB	0.0370	5.97	1
11031	1234678-HpCDD	35822-46-9	0.625	JB	0.0600	5.97	1
11031	OCDD	3268-87-9	2.34	JB	0.0472	11.9	1
11031	2378-TCDF	51207-31-9	0.0688	U	0.0688	1.19	1
11031	12378-PeCDF	57117-41-6	0.0767	JBQ	0.0294	5.97	1
11031	23478-PeCDF	57117-31-4	0.135	JB	0.0307	5.97	1
11031	123478-HxCDF	70648-26-9	0.130	JBQ	0.0276	5.97	1
11031	123678-HxCDF	57117-44-9	0.0748	JB	0.0243	5.97	1
11031	123789-HxCDF	72918-21-9	0.217	JBQ	0.0329	5.97	1
11031	234678-HxCDF	60851-34-5	0.127	JBQ	0.0270	5.97	1
11031	1234678-HpCDF	67562-39-4	0.454	JB	0.0231	5.97	1
11031	1234789-HpCDF	55673-89-7	0.0894	JB	0.0309	5.97	1
11031	OCDF	39001-02-0	0.399	JBQ	0.0613	11.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	88	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169041
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2911 SDG#: DX029-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-281-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-4.0-5.0

LLI Sample # SW 6169041
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:30

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2911 SDG#: DX029-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 10:58	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169042
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2912 SDG#: DX029-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	12.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169042
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2912 SDG#: DX029-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0449	U	0.0449	1.14	1
11031	12378-PeCDD	40321-76-4	0.0821	JB	0.0636	5.71	1
11031	123478-HxCDD	39227-28-6	0.0402	U	0.0402	5.71	1
11031	123678-HxCDD	57653-85-7	0.286	JB	0.0412	5.71	1
11031	123789-HxCDD	19408-74-3	0.441	JB	0.0402	5.71	1
11031	1234678-HpCDD	35822-46-9	0.797	JB	0.0628	5.71	1
11031	OCDD	3268-87-9	4.41	JB	0.0505	11.4	1
11031	2378-TCDF	51207-31-9	0.0594	U	0.0594	1.14	1
11031	12378-PeCDF	57117-41-6	0.0816	JBQ	0.0295	5.71	1
11031	23478-PeCDF	57117-31-4	0.138	JBQ	0.0299	5.71	1
11031	123478-HxCDF	70648-26-9	0.0812	JB	0.0354	5.71	1
11031	123678-HxCDF	57117-44-9	0.0979	JBQ	0.0318	5.71	1
11031	123789-HxCDF	72918-21-9	0.301	JB	0.0394	5.71	1
11031	234678-HxCDF	60851-34-5	0.151	JBQ	0.0345	5.71	1
11031	1234678-HpCDF	67562-39-4	0.491	JB	0.0225	5.71	1
11031	1234789-HpCDF	55673-89-7	0.0860	JB	0.0322	5.71	1
11031	OCDF	39001-02-0	0.458	JBQ	0.0551	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	66	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169042
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2912 SDG#: DX029-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-281-SA5B-SB-8.0-9.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-281-SA5B-SB-8.0-9.0

LLI Sample # SW 6169042
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 12:37

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2912 SDG#: DX029-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 11:54	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169043
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2913 SDG#: DX029-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169043
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2913 SDG#: DX029-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0396 U	0.0396	1.12	1
11031	12378-PeCDD	40321-76-4	0.0710 JBQ	0.0445	5.62	1
11031	123478-HxCDD	39227-28-6	0.0382 JBQ	0.0290	5.62	1
11031	123678-HxCDD	57653-85-7	0.0518 JBQ	0.0292	5.62	1
11031	123789-HxCDD	19408-74-3	0.0290 U	0.0290	5.62	1
11031	1234678-HpCDD	35822-46-9	0.324 JB	0.0399	5.62	1
11031	OCDD	3268-87-9	1.25 JB	0.0466	11.2	1
11031	2378-TCDF	51207-31-9	0.0364 U	0.0364	1.12	1
11031	12378-PeCDF	57117-41-6	0.0306 JB	0.0214	5.62	1
11031	23478-PeCDF	57117-31-4	0.0833 JB	0.0217	5.62	1
11031	123478-HxCDF	70648-26-9	0.0737 JBQ	0.0201	5.62	1
11031	123678-HxCDF	57117-44-9	0.0466 JB	0.0181	5.62	1
11031	123789-HxCDF	72918-21-9	0.0703 JBQ	0.0229	5.62	1
11031	234678-HxCDF	60851-34-5	0.117 JB	0.0202	5.62	1
11031	1234678-HpCDF	67562-39-4	0.422 JB	0.0181	5.62	1
11031	1234789-HpCDF	55673-89-7	0.0561 JBQ	0.0252	5.62	1
11031	OCDF	39001-02-0	0.430 JBQ	0.0520	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	69	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169043
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2913 SDG#: DX029-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-026-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-4.0-5.0

LLI Sample # SW 6169043
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:08

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2913 SDG#: DX029-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 12:51	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169044
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2914 SDG#: DX029-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169044
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2914 SDG#: DX029-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0404 U	0.0404	1.09	1
11031	12378-PeCDD	40321-76-4	0.0558 JBQ	0.0381	5.46	1
11031	123478-HxCDD	39227-28-6	0.0301 U	0.0301	5.46	1
11031	123678-HxCDD	57653-85-7	0.0607 JBQ	0.0324	5.46	1
11031	123789-HxCDD	19408-74-3	0.0935 JBQ	0.0308	5.46	1
11031	1234678-HpCDD	35822-46-9	0.293 JB	0.0418	5.46	1
11031	OCDD	3268-87-9	1.26 JB	0.0464	10.9	1
11031	2378-TCDF	51207-31-9	0.0424 U	0.0424	1.09	1
11031	12378-PeCDF	57117-41-6	0.0518 JBQ	0.0203	5.46	1
11031	23478-PeCDF	57117-31-4	0.108 JBQ	0.0202	5.46	1
11031	123478-HxCDF	70648-26-9	0.0869 JBQ	0.0237	5.46	1
11031	123678-HxCDF	57117-44-9	0.0610 JB	0.0226	5.46	1
11031	123789-HxCDF	72918-21-9	0.0646 JBQ	0.0262	5.46	1
11031	234678-HxCDF	60851-34-5	0.160 JBQ	0.0230	5.46	1
11031	1234678-HpCDF	67562-39-4	0.425 JB	0.0195	5.46	1
11031	1234789-HpCDF	55673-89-7	0.0481 JBQ	0.0246	5.46	1
11031	OCDF	39001-02-0	0.365 JB	0.0471	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	72	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	77	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	75	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	72	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-026-SA5B-SB-9.0-10 Soil**
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169044
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2914 SDG#: DX029-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-026-SA5B-SB-9.0-10 Soil
SSFL Area IV Collocated Soil Sampling
SL-026-SA5B-SB-9.0-10

LLI Sample # SW 6169044
LLI Group # 1226240
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/17/2010 15:19

Submitted: 12/18/2010 12:40
Reported: 02/24/2011 22:38

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

X2914 SDG#: DX029-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 13:48	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11011162401A	01/11/2011 17:56	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226240
Reported: 02/24/11 at 10:38 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10354162401B	Sample number(s): 6169031,6169034-6169038									
28a Moisture Content by 160.3						100		80-120		
Batch number: 11011162401A	Sample number(s): 6169039-6169044									
28a Moisture Content by 160.3						100		80-120		

Analysis Name	Blank Result		Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 10362001	Sample number(s): 6169032-6169033									
2378-TCDD	2.81		1.76	2.00	pg/l	89		67-158		
12378-PeCDD	0.684	J	0.492	10.0	pg/l	96		70-142		
123478-HxCDD	0.485	J	0.235	10.0	pg/l	106		70-164		
123678-HxCDD	0.512	J	0.243	10.0	pg/l	104		76-134		
123789-HxCDD	0.483	J	0.269	10.0	pg/l	106		64-162		
1234678-HpCDD	1.35	J	0.246	10.0	pg/l	108		70-140		
OCDD	2.39	J	0.274	20.0	pg/l	118		78-144		
2378-TCDF	0.181	J	0.166	2.00	pg/l	95		75-158		
12378-PeCDF	0.474	J	0.125	10.0	pg/l	104		80-134		
23478-PeCDF	0.810	J	0.113	10.0	pg/l	102		68-160		
123478-HxCDF	0.599	J	0.136	10.0	pg/l	111		72-134		
123678-HxCDF	0.568	J	0.132	10.0	pg/l	113		84-130		
123789-HxCDF	0.637	J	0.143	10.0	pg/l	111		78-130		
234678-HxCDF	0.505	J	0.136	10.0	pg/l	109		70-156		
1234678-HpCDF	1.41	J	0.122	10.0	pg/l	116		82-122		
1234789-HpCDF	0.582	J	0.148	10.0	pg/l	117		78-138		
OCDF	1.43	J	0.269	20.0	pg/l	122		63-170		
Batch number: 11012001	Sample number(s): 6169031,6169034-6169044									
2378-TCDD	0.0393	U	0.0393	1.00	ng/kg	102		67-158		
12378-PeCDD	0.199	J	0.0435	5.00	ng/kg	101		70-142		
123478-HxCDD	0.147	J	0.0378	5.00	ng/kg	99		70-164		
123678-HxCDD	0.162	J	0.0378	5.00	ng/kg	101		76-134		
123789-HxCDD	0.167	J	0.0372	5.00	ng/kg	98		64-162		
1234678-HpCDD	0.437	J	0.0525	5.00	ng/kg	100		70-140		
OCDD	1.37	J	0.0491	10.0	ng/kg	100		78-144		
2378-TCDF	0.0396	U	0.0396	1.00	ng/kg	106		75-158		
2378-TCDF-Conf	0.0679	J	0.0199	1.00	ng/kg					
12378-PeCDF	0.199	J	0.0246	5.00	ng/kg	99		80-134		
23478-PeCDF	0.230	J	0.0245	5.00	ng/kg	101		68-160		
123478-HxCDF	0.209	J	0.0352	5.00	ng/kg	99		72-134		
123678-HxCDF	0.226	J	0.0317	5.00	ng/kg	98		84-130		
123789-HxCDF	0.206	J	0.0395	5.00	ng/kg	98		78-130		
234678-HxCDF	0.207	J	0.0339	5.00	ng/kg	98		70-156		
1234678-HpCDF	1.49	J	0.0429	5.00	ng/kg	97		82-122		
1234789-HpCDF	0.200	J	0.0602	5.00	ng/kg	98		78-138		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226240
Reported: 02/24/11 at 10:38 PM

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
OCDF	0.495 J	0.0525	10.0	ng/kg	99		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10354162401B	Sample number(s): 6169031,6169034-6169038 BKG: P158227								
28a Moisture Content by 160.3						12.4	12.9	3	20
Batch number: 11011162401A	Sample number(s): 6169039-6169044 BKG: P167523								
28a Moisture Content by 160.3						9.7	9.7	0	20
Batch number: 11012001	Sample number(s): 6169031,6169034-6169044 UNSPK: P172048								
2378-TCDD	106	105	67-158	1	25				
12378-PeCDD	106	104	70-142	2	25				
123478-HxCDD	106	101	70-164	5	25				
123678-HxCDD	102	102	76-134	0	25				
123789-HxCDD	103	99	64-162	5	25				
1234678-HpCDD	104	100	70-140	4	25				
OCDD	110	100	78-144	8	25				
2378-TCDF	115	108	75-158	6	25				
12378-PeCDF	103	102	80-134	2	25				
23478-PeCDF	105	102	68-160	3	25				
123478-HxCDF	103	99	72-134	4	25				
123678-HxCDF	103	100	84-130	3	25				
123789-HxCDF	102	98	78-130	5	25				
234678-HxCDF	102	100	70-156	2	25				
1234678-HpCDF	102	99	82-122	3	25				
1234789-HpCDF	102	99	78-138	3	25				
OCDF	105	103	63-170	2	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B
Batch number: 10362001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6169032	4*	58	49	48	52	53
6169033	16*	67	61	60	63	66
Blank	6*	70	67	66	66	69
OPR	10*	63	56	55	57	61
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226240
Reported: 02/24/11 at 10:38 PM

Surrogate Quality Control

6169032	52	53	49	8*	27	45
6169033	63	63	58	21*	48	59
Blank	64	61	54	11*	32	58
OPR	55	54	48	17*	37	52
Limits:	28-143	26-138	17-157	35-197	25-181	32-141

	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6169032	43	40	52	51	46	52
6169033	56	56	64	60	52	63
Blank	54	49	63	55	57	68
OPR	50	46	56	48	51	60
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11012001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6169031	85	89	79	83	80	85
6169034	75	83	77	79	77	79
6169035	66	78	68	78	74	79
6169036	70	79	74	78	75	86
6169037	73	79	76	78	76	85
6169038	67	74	67	72	67	71
6169039	69	79	72	75	73	77
6169040	71	90	79	84	78	85
6169041	70	80	71	78	71	72
6169042	67	71	67	73	67	73
6169043	68	77	71	78	72	77
6169044	69	77	69	72	70	77
Blank	76	80	76	82	78	83
MS	66	76	70	74	70	70
MSD	85	96	85	90	87	99
OPR	73	72	73	77	74	80
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6169031	94	89	91	94	91	87
6169034	85	84	88	87	83	83
6169035	89	88	86	80	77	85
6169036	87	83	83	87	80	81
6169037	84	81	80	91	80	79
6169038	80	72	71	86	74	74
6169039	85	80	78	89	78	77
6169040	95	90	89	95	88	87
6169041	88	77	75	88	82	78
6169042	81	70	66	85	72	74
6169043	85	75	69	86	79	79
6169044	75	75	72	85	77	74
Blank	96	86	83	95	83	85
MS	84	75	73	82	77	75

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226240
Reported: 02/24/11 at 10:38 PM

Surrogate Quality Control

MSD	101	97	93	97	96	92
OPR	90	79	75	89	77	81
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6169031	86	88	99	108	82	91
6169034	82	82	94	104	77	82
6169035	89	81	84	89	62	68
6169036	80	79	88	89	73	82
6169037	81	79	86	85	76	81
6169038	72	72	79	78	69	78
6169039	77	76	85	84	72	79
6169040	84	85	96	96	78	89
6169041	77	79	86	86	72	84
6169042	73	73	77	75	70	76
6169043	77	79	82	79	71	81
6169044	72	73	77	76	71	78
Blank	86	86	96	95	75	83
MS	76	75	81	82	68	78
MSD	93	94	102	102	86	98
OPR	81	81	89	86	71	75
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

	13C12-2378-TCDF-Conf
6169031	70
6169034	
6169035	
6169036	
6169037	71
6169038	
6169039	
6169040	
6169041	
6169042	
6169043	
6169044	
Blank	78
MS	
MSD	
OPR	
Limits:	24-169

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

acct#13013 Cup#1226240 sample#6169031-44

CHAIN OF CUSTODY RECORD

CDM | SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-DRO EPA 8015B Mod.	*Metals EPA 6010/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
DUP08-SA5B-QC-121710	12.17.10	1407	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										surface soil DUP
EB05-SA5B-121710	12.17.10	1235	water	none	6-1 liter ambers			X						X	X			X	X										surface tool rinsate
EB05-SA5B-121710	12.17.10	1235	water	none	1-500 ml poly							X	X			X													surface tool rinsate
EB05-SA5B-121710	12.17.10	1235	water	HNO3	1-500 ml poly						X																		surface tool rinsate
EB01-SIV-121710	12.17.10	1235	water	none	6-1 liter ambers			X						X	X			X	X										sediment tool rinsate
EB01-SIV-121710	12.17.10	1235	water	none	1-500 ml poly							X	X			X													sediment tool rinsate
EB01-SIV-121710	12.17.10	1235	water	HNO3	1-500 ml poly						X																		sediment tool rinsate
SED-014-SIV-SD-0.0-0.5	12.17.10	0844	soil	none	1 x 16 oz. jars & 1 6" sleeves			X			X	X	X	X	X	X		X	X										
SED-012-SIV-SD-0.0-0.5	12.17.10	1024	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-006-SIV-SD-0.0-0.5	12.17.10	1525	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-001-SIV-SD-0.0-0.5	12.17.10	1241	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-004-SIV-SD-0.0-0.5	12.17.10	1142	soil	none	1 x 16 oz. jars & 1 6" sleeves			X			X	X	X	X	X	X		X	X										
SL-282-SA5B-SB-4.0-5.0	12.17.10	1020	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-282-SA5B-SB-4.5	12.17.10	1015	soil	none	5 Encore Samplers	X	X		X																				
SL-282-SA5B-SB-7.5	12.17.10	1024	soil	none	5 Encore Samplers	X	X		X																				
SL-282-SA5B-SB-7.0-8.0	12.17.10	1028	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-281-SA5B-SB-4.0-5.0	12.17.10	1230	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-281-SA5B-SB-4.5	12.17.10	1225	soil	none	5 Encore Samplers	X	X		X																				
SL-281-SA5B-SB-8.0-9.0	12.17.10	1237	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-281-SA5B-SB-8.5	12.17.10	1233	soil	none	5 Encore Samplers	X	X		X																				
SL-026-SA5B-4.0-5.0	12.17.10	1508	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-026-SA5B-4.5	12.17.10	1503	soil	none	5 Encore Samplers	X	X		X																				
SL-026-SA5B-9.0-10	12.17.10	1519	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-026-SA5B-9.5	12.17.10	1513	soil	none	5 Encore Samplers	X	X		X																				
SL-207-SA5B-SS-0.0-0.5	12.17.10	1110	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-208-SA5B-SS-0.0-0.5	12.17.10	1053	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-276-SA5B-SS-0.0-0.5	12.17.10	0930	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-210-SA5B-SS-0.0-0.5	12.17.10	1128	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-275-SA5B-SS-0.0-0.5	12.17.10	0945	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-206-SA5B-SS-0.0-0.5	12.17.10	1010	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-209-SA5B-SS-0.0-0.5	12.17.10	1142	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-161-SA5B-SS-0.0-0.5	12.17.10	1004	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-162-SA5B-SS-0.0-0.5	12.17.10	0942	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-274-SA5B-SS-0.0-0.5	12.17.10	1128	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-166-SA5B-SS-0.0-0.5	12.17.10	1108	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-160-SA5B-SS-0.0-0.5	12.17.10	1122	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-211-SA5B-SS-0.0-0.5MS	12.17.10	1402	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X										surface soil MS/MSD
SL-278-SA5B-SS-0.0-0.5	12.17.10	1411	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-279-SA5B-SS-0.0-0.5	12.17.10	1428	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-277-SA5B-SS-0.0-0.5	12.17.10	1355	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-273-SA5B-SS-0.0-0.5	12.17.10	1420	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-272-SA5B-SS-0.0-0.5	12.17.10	1440	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
TB-121710	12.17.10	0800	water	HCl	4-40 mL clear VOA vials	X	X		X																				trip blank

Relinquished by: (Signature) — Date/Time: 12.17.10 | 1700 — Received for Laboratory by: (Signature) — Date/Time: 12/18/10 1240

Relinquished by: (Signature) — Date/Time — Airbill No.: 00732992

Laboratory: Lancaster Laboratories, Inc.

No. of coolers = 5

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 01, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/22/2010
Group Number: 1226677
SDG: DE046
PO Number: 1203-004-007-AL
Release Number: Tracking #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
DUP01-SIV-QC-122010 Soil	6172036
SED-003-SIV-SD-0.0-0.5 Soil	6172037
SED-005-SIV-SD-0.0-0.5 Soil	6172038
SED-005-SIV-SD-0.0-0.5MS Soil	6172039
SED-005-SIV-SD-0.0-0.5MSD Soil	6172040
SED-005-SIV-SD-0.0-0.5DUP Soil	6172041
SED-007-SIV-SD-0.0-0.6 Soil	6172042
SED-008-SIV-SD-0.0-0.5 Soil	6172043
SED-034-SIV-SD-0.0-0.5 Soil	6172044
SED-037-SIV-SD-0.0-0.5 Soil	6172045

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	CDM Federal Services Program	Attn: Todd Burgesser
1 COPY TO	Data Package Group	

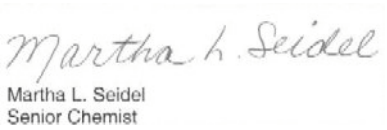
Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Martha L. Seidel
Senior Chemist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172036
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP01 SDG#: DE046-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	210	U	210	630	1
04688	Benzidine	92-87-5	1,500	U	1,500	4,200	1
04688	Benzoic acid	65-85-0	210	U	210	630	1
04688	Benzyl alcohol	100-51-6	210	U	210	630	1
04688	4-Bromophenyl-phenylether	101-55-3	21	U	21	210	1
04688	Carbazole	86-74-8	21	U	21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	42	U	42	210	1
04688	4-Chloroaniline	106-47-8	84	U	84	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U	21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U	21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U	21	210	1
04688	2-Chloronaphthalene	91-58-7	21	U	21	210	1
04688	2-Chlorophenol	95-57-8	21	U	21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	42	U	42	210	1
04688	Dibenzofuran	132-64-9	21	U	21	210	1
04688	1,2-Dichlorobenzene	95-50-1	21	U	21	210	1
04688	1,3-Dichlorobenzene	541-73-1	21	U	21	210	1
04688	1,4-Dichlorobenzene	106-46-7	21	U	21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U	130	420	1
04688	2,4-Dichlorophenol	120-83-2	21	U	21	210	1
04688	2,4-Dimethylphenol	105-67-9	42	U	42	210	1
04688	3,5-Dimethylphenol	108-68-9	42	U	42	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U	210	630	1
04688	2,4-Dinitrophenol	51-28-5	840	U	840	2,500	1
04688	2,4-Dinitrotoluene	121-14-2	42	U	42	210	1
04688	2,6-Dinitrotoluene	606-20-2	21	U	21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	21	U	21	210	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	22	J	21	420	1
04688	Hexachlorobenzene	118-74-1	21	U	21	210	1
04688	Hexachlorobutadiene	87-68-3	84	U	84	210	1
04688	Hexachlorocyclopentadiene	77-47-4	210	U	210	630	1
04688	Hexachloroethane	67-72-1	21	U	21	210	1
04688	Isophorone	78-59-1	21	U	21	210	1
04688	2-Methylphenol	95-48-7	42	U	42	210	1
04688	4-Methylphenol	106-44-5	42	U	42	210	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	21	U	21	210	1
04688	3-Nitroaniline	99-09-2	42	U	42	210	1
04688	4-Nitroaniline	100-01-6	84	U	84	210	1
04688	Nitrobenzene	98-95-3	21	U	21	210	1
04688	2-Nitrophenol	88-75-5	21	U	21	210	1
04688	4-Nitrophenol	100-02-7	210	U	210	630	1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U	21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	21	U	21	210	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	210	U	210	630	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172036
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP01 SDG#: DE046-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	21	U	21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	21	U	21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	42	U	42	210	1
04688	2,4,6-Trichlorophenol	88-06-2	42	U	42	210	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.84	U	0.84	2.1	1
10138	Acenaphthylene	208-96-8	0.42	U	0.42	2.1	1
10138	Anthracene	120-12-7	0.42	U	0.42	2.1	1
10138	Benzo(a)anthracene	56-55-3	0.84	U	0.84	2.1	1
10138	Benzo(a)pyrene	50-32-8	0.84	U	0.84	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	0.84	U	0.84	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	0.84	U	0.84	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	0.84	U	0.84	2.1	1
10138	Butylbenzylphthalate	85-68-7	7.6	U	7.6	23	1
10138	Di-n-butylphthalate	84-74-2	7.6	U	7.6	23	1
10138	Chrysene	218-01-9	0.71	J	0.42	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	0.84	U	0.84	2.1	1
10138	Diethylphthalate	84-66-2	7.6	U	7.6	23	1
10138	Dimethylphthalate	131-11-3	7.6	U	7.6	23	1
10138	Fluoranthene	206-44-0	0.84	U	0.84	2.1	1
10138	Fluorene	86-73-7	0.84	U	0.84	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.84	U	0.84	2.1	1
10138	1-Methylnaphthalene	90-12-0	0.84	U	0.84	2.1	1
10138	2-Methylnaphthalene	91-57-6	0.84	U	0.84	2.1	1
10138	Naphthalene	91-20-3	0.84	U	0.84	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	0.84	U	0.84	2.1	1
10138	Di-n-octylphthalate	117-84-0	7.6	U	7.6	23	1
10138	Phenanthrene	85-01-8	0.85	J	0.84	2.1	1
10138	Pyrene	129-00-0	0.84	U	0.84	2.1	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.5	U	1.5	4.5	1
10401	Dalapon	75-99-0	5.6	U	5.6	11	1
10401	2,4-DB	94-82-6	5.8	U	5.8	5.8	1
10401	Dicamba	1918-00-9	0.51	U	0.51	1.5	1
10401	Dinoseb	88-85-7	1.0	U	1.0	3.0	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0	U	1.0	2.1	1
10401	MCPA	94-74-6	96	U	96	320	1
10401	MCPP (Mecoprop)	93-65-2	95	U	95	320	1
10401	2,4,5-T	93-76-5	0.10	U	0.10	0.21	1
10401	2,4,5-TP	93-72-1	0.18	J	0.095	0.21	1

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172036
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP01 SDG#: DE046-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.083	U	0.083	0.21	1
01363	Alpha BHC	319-84-6	0.043	U	0.043	0.21	1
01363	Beta BHC	319-85-7	0.076	U	0.076	0.21	1
01363	Gamma BHC - Lindane	58-89-9	0.043	U	0.043	0.21	1
01363	Chlordane	57-74-9	1.0	U	1.0	4.3	1
01363	p,p-DDD	72-54-8	0.48	U	0.48	0.48	1
01363	p,p-DDE	72-55-9	0.71		0.083	0.43	1
01363	p,p-DDT	50-29-3	0.86		0.083	0.43	1
01363	Delta BHC	319-86-8	0.045	U	0.045	0.21	1
01363	Dieldrin	60-57-1	0.12	U	0.12	0.43	1
01363	Endosulfan I	959-98-8	0.056	U	0.056	0.21	1
01363	Endosulfan II	33213-65-9	0.083	U	0.083	0.43	1
01363	Endosulfan Sulfate	1031-07-8	0.083	U	0.083	0.43	1
01363	Endrin	72-20-8	0.083	U	0.083	0.43	1
01363	Endrin Aldehyde	7421-93-4	0.27	J	0.083	0.43	1
01363	Endrin Ketone	53494-70-5	0.083	U	0.083	0.43	1
01363	Heptachlor	76-44-8	0.076	U	0.076	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.078	J	0.043	0.21	1
01363	Methoxychlor	72-43-5	0.43	U	0.43	2.1	1
01363	Mirex	2385-85-5	0.095	J	0.083	0.43	1
01363	Toxaphene	8001-35-2	2.8	U	2.8	8.3	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram, the values reported for dieldrin and endrin represent the lowest reporting limits attainable.
Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.3	U	1.3	4.2	1
10225	Aroclor 5442	12642-23-8	1.3	U	1.3	4.2	1
10225	Aroclor 5460	11126-42-4	1.3	U	1.3	4.2	1
10225	PCB-1016	12674-11-2	0.42	U	0.42	2.1	1
10225	PCB-1221	11104-28-2	0.63	U	0.63	2.1	1
10225	PCB-1232	11141-16-5	0.66	U	0.66	2.1	1
10225	PCB-1242	53469-21-9	0.63	U	0.63	2.1	1
10225	PCB-1248	12672-29-6	0.42	U	0.42	2.1	1
10225	PCB-1254	11097-69-1	0.42	U	0.42	2.1	1
10225	PCB-1260	11096-82-5	0.42	U	0.42	2.1	1
10225	PCB-1262	37324-23-5	0.42	U	0.42	2.1	1
10225	PCB-1268	11100-14-4	0.42	U	0.42	2.1	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,100		6.11	24.3	1
07914	Boron	7440-42-8	5.00	J	1.08	6.07	1
01650	Calcium	7440-70-2	2,620		7.44	24.3	1
01654	Iron	7439-89-6	18,600		5.72	24.3	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172036
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP01 SDG#: DE046-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01656	Lithium	7439-93-2	22.7		0.27	2.4	1
01657	Magnesium	7439-95-4	4,410		3.08	12.1	1
06958	Manganese	7439-96-5	287		0.0947	0.607	1
10145	Phosphorus	7723-14-0	462		0.680	12.1	1
01662	Potassium	7440-09-7	3,130		21.9	60.7	1
01667	Sodium	7440-23-5	75.0	J	45.3	121	1
07968	Strontium	7440-24-6	16.2		0.0753	0.607	1
06969	Tin	7440-31-5	2.20	J	1.21	12.1	1
06970	Titanium	7440-32-6	1,090		0.461	1.21	1
10146	Zirconium	7440-67-7	1.20	J	1.02	6.07	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.134	J	0.0743	0.248	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.30		0.0743	0.495	2
06126	Barium	7440-39-3	122		0.134	0.495	2
06127	Beryllium	7440-41-7	0.646		0.0198	0.124	2
06128	Cadmium	7440-43-9	0.267		0.0446	0.124	2
06131	Chromium	7440-47-3	21.4		0.149	0.495	2
06132	Cobalt	7440-48-4	6.69		0.0248	0.124	2
06133	Copper	7440-50-8	10.4		0.0817	0.495	2
06135	Lead	7439-92-1	18.4		0.0129	0.248	2
06138	Molybdenum	7439-98-7	0.747		0.0619	0.124	2
06139	Nickel	7440-02-0	16.3		0.124	0.495	2
06141	Selenium	7782-49-2	0.183	J	0.0495	0.495	2
06142	Silver	7440-22-4	0.0727	J	0.0149	0.124	2
06145	Thallium	7440-28-0	0.366		0.0371	0.124	2
06148	Vanadium	7440-62-2	40.6		0.0272	0.124	2
06149	Zinc	7440-66-6	86.4		0.693	3.71	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0285	J	0.0036	0.125	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.3		1.0	1.3	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.4	U	11.4	37.9	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.37	J	0.25	1.3	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	541		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172036
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP01 SDG#: DE046-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	5.94	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	20.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 22:32	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 15:07	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/06/2011 21:54	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 22:26	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 20:31	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172036
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP01 SDG#: DE046-01FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:40	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 05:50	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 11:02	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 11:02	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:40	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 11:02	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:06	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 01:02	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 02:43	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 16:04	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-003-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172037
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD003 SDG#: DE046-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	230	U	230	680	1
04688	Benzidine	92-87-5	1,600	U	1,600	4,500	1
04688	Benzoic acid	65-85-0	230	U	230	680	1
04688	Benzyl alcohol	100-51-6	230	U	230	680	1
04688	4-Bromophenyl-phenylether	101-55-3	23	U	23	230	1
04688	Carbazole	86-74-8	23	U	23	230	1
04688	4-Chloro-3-methylphenol	59-50-7	45	U	45	230	1
04688	4-Chloroaniline	106-47-8	90	U	90	230	1
04688	bis(2-Chloroethoxy)methane	111-91-1	23	U	23	230	1
04688	bis(2-Chloroethyl)ether	111-44-4	23	U	23	230	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	23	U	23	230	1
04688	2-Chloronaphthalene	91-58-7	23	U	23	230	1
04688	2-Chlorophenol	95-57-8	23	U	23	230	1
04688	4-Chlorophenyl-phenylether	7005-72-3	45	U	45	230	1
04688	Dibenzofuran	132-64-9	23	U	23	230	1
04688	1,2-Dichlorobenzene	95-50-1	23	U	23	230	1
04688	1,3-Dichlorobenzene	541-73-1	23	U	23	230	1
04688	1,4-Dichlorobenzene	106-46-7	23	U	23	230	1
04688	3,3'-Dichlorobenzidine	91-94-1	140	U	140	450	1
04688	2,4-Dichlorophenol	120-83-2	23	U	23	230	1
04688	2,4-Dimethylphenol	105-67-9	45	U	45	230	1
04688	3,5-Dimethylphenol	108-68-9	45	U	45	230	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	230	U	230	680	1
04688	2,4-Dinitrophenol	51-28-5	900	U	900	2,700	1
04688	2,4-Dinitrotoluene	121-14-2	45	U	45	230	1
04688	2,6-Dinitrotoluene	606-20-2	23	U	23	230	1
04688	1,2-Diphenylhydrazine	122-66-7	23	U	23	230	1
04688	Hexachlorobenzene	118-74-1	23	U	23	230	1
04688	Hexachlorobutadiene	87-68-3	90	U	90	230	1
04688	Hexachlorocyclopentadiene	77-47-4	230	U	230	680	1
04688	Hexachloroethane	67-72-1	23	U	23	230	1
04688	Isophorone	78-59-1	23	U	23	230	1
04688	2-Methylphenol	95-48-7	45	U	45	230	1
04688	4-Methylphenol	106-44-5	45	U	45	230	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	23	U	23	230	1
04688	3-Nitroaniline	99-09-2	45	U	45	230	1
04688	4-Nitroaniline	100-01-6	90	U	90	230	1
04688	Nitrobenzene	98-95-3	23	U	23	230	1
04688	2-Nitrophenol	88-75-5	23	U	23	230	1
04688	4-Nitrophenol	100-02-7	230	U	230	680	1
04688	N-Nitroso-di-n-propylamine	621-64-7	23	U	23	230	1
04688	N-Nitrosodiphenylamine	86-30-6	23	U	23	230	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	230	U	230	680	1
04688	Phenol	108-95-2	23	U	23	230	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-003-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172037
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD003 SDG#: DE046-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	23	U	23	230	1
04688	2,4,5-Trichlorophenol	95-95-4	45	U	45	230	1
04688	2,4,6-Trichlorophenol	88-06-2	45	U	45	230	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.90	U	0.90	2.3	1
10138	Acenaphthylene	208-96-8	0.45	U	0.45	2.3	1
10138	Anthracene	120-12-7	0.45	U	0.45	2.3	1
10138	Benzo(a)anthracene	56-55-3	0.90	U	0.90	2.3	1
10138	Benzo(a)pyrene	50-32-8	0.90	U	0.90	2.3	1
10138	Benzo(b)fluoranthene	205-99-2	1.9	J	0.90	2.3	1
10138	Benzo(g,h,i)perylene	191-24-2	1.0	J	0.90	2.3	1
10138	Benzo(k)fluoranthene	207-08-9	0.90	U	0.90	2.3	1
10138	Butylbenzylphthalate	85-68-7	17	J	8.1	24	1
10138	Di-n-butylphthalate	84-74-2	8.1	U	8.1	24	1
10138	Chrysene	218-01-9	7.1		0.45	2.3	1
10138	Dibenz(a,h)anthracene	53-70-3	0.90	U	0.90	2.3	1
10138	Diethylphthalate	84-66-2	8.1	U	8.1	24	1
10138	Dimethylphthalate	131-11-3	8.1	U	8.1	24	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	38		8.1	24	1
10138	Fluoranthene	206-44-0	1.5	J	0.90	2.3	1
10138	Fluorene	86-73-7	0.90	U	0.90	2.3	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.90	U	0.90	2.3	1
10138	1-Methylnaphthalene	90-12-0	0.90	U	0.90	2.3	1
10138	2-Methylnaphthalene	91-57-6	0.90	U	0.90	2.3	1
10138	Naphthalene	91-20-3	0.91	J	0.90	2.3	1
10138	N-Nitrosodimethylamine	62-75-9	0.90	U	0.90	2.3	1
10138	Di-n-octylphthalate	117-84-0	8.1	U	8.1	24	1
10138	Phenanthrene	85-01-8	1.3	J	0.90	2.3	1
10138	Pyrene	129-00-0	1.3	J	0.90	2.3	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.6	U	1.6	4.9	1
10401	Dalapon	75-99-0	6.0	U	6.0	12	1
10401	2,4-DB	94-82-6	0.92	U	0.92	2.3	1
10401	Dicamba	1918-00-9	0.54	U	0.54	1.6	1
10401	Dinoseb	88-85-7	1.1	U	1.1	3.2	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.1	U	1.1	2.3	1
10401	MCPA	94-74-6	340	J	100	340	1
10401	MCPP (Mecoprop)	93-65-2	220	J	100	340	1
10401	2,4,5-T	93-76-5	0.11	U	0.11	0.23	1
10401	2,4,5-TP	93-72-1	0.10	U	0.10	0.23	1

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SED-003-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172037
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD003 SDG#: DE046-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.089	U	0.089	0.22	1
01363	Alpha BHC	319-84-6	0.046	U	0.046	0.22	1
01363	Beta BHC	319-85-7	0.081	U	0.081	0.22	1
01363	Gamma BHC - Lindane	58-89-9	0.058	J	0.046	0.22	1
01363	Chlordane	57-74-9	1.1	U	1.1	4.6	1
01363	p,p-DDD	72-54-8	0.22	U	0.22	0.46	1
01363	p,p-DDE	72-55-9	2.7	U	2.7	2.7	1
01363	p,p-DDT	50-29-3	11		0.45	2.3	5
01363	Delta BHC	319-86-8	0.049	U	0.049	0.22	1
01363	Dieldrin	60-57-1	0.93	U	0.93	0.93	1
01363	Endosulfan I	959-98-8	0.060	U	0.060	0.22	1
01363	Endosulfan II	33213-65-9	1.7	U	1.7	1.7	1
01363	Endosulfan Sulfate	1031-07-8	0.089	U	0.089	0.46	1
01363	Endrin	72-20-8	1.2		0.089	0.46	1
01363	Endrin Aldehyde	7421-93-4	0.80	U	0.80	0.80	1
01363	Endrin Ketone	53494-70-5	0.089	U	0.089	0.46	1
01363	Heptachlor	76-44-8	0.081	U	0.081	0.22	1
01363	Heptachlor Epoxide	1024-57-3	0.74	U	0.74	0.74	1
01363	Methoxychlor	72-43-5	0.46	U	0.46	2.2	1
01363	Mirex	2385-85-5	0.089	U	0.089	0.46	1
01363	Toxaphene	8001-35-2	3.0	U	3.0	8.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	6.8	U	6.8	22	5
10225	Aroclor 5442	12642-23-8	6.8	U	6.8	22	5
10225	Aroclor 5460	11126-42-4	6.8	U	6.8	22	5
10225	PCB-1016	12674-11-2	2.2	U	2.2	12	5
10225	PCB-1221	11104-28-2	3.4	U	3.4	12	5
10225	PCB-1232	11141-16-5	3.5	U	3.5	12	5
10225	PCB-1242	53469-21-9	3.4	U	3.4	12	5
10225	PCB-1248	12672-29-6	2.2	U	2.2	12	5
10225	PCB-1254	11097-69-1	63		2.2	12	5
10225	PCB-1260	11096-82-5	45		2.2	12	5
10225	PCB-1262	37324-23-5	2.2	U	2.2	12	5
10225	PCB-1268	11100-14-4	2.2	U	2.2	12	5

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,400		6.48	25.8	1
07914	Boron	7440-42-8	5.57	J	1.15	6.44	1
01650	Calcium	7440-70-2	2,810		7.90	25.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-003-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172037
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD003 SDG#: DE046-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01654	Iron	7439-89-6	14,800		6.07	25.8	1
01656	Lithium	7439-93-2	20.3		0.28	2.6	1
01657	Magnesium	7439-95-4	3,220		3.27	12.9	1
06958	Manganese	7439-96-5	190		0.101	0.644	1
10145	Phosphorus	7723-14-0	378		0.722	12.9	1
01662	Potassium	7440-09-7	2,930		23.2	64.4	1
01667	Sodium	7440-23-5	99.8	J	48.1	129	1
07968	Strontium	7440-24-6	14.6		0.0799	0.644	1
06969	Tin	7440-31-5	2.28	J	1.29	12.9	1
06970	Titanium	7440-32-6	856		0.490	1.29	1
10146	Zirconium	7440-67-7	1.21	J	1.08	6.44	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.104	J	0.0796	0.265	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.91		0.0796	0.531	2
06126	Barium	7440-39-3	101		0.143	0.531	2
06127	Beryllium	7440-41-7	0.565		0.0212	0.133	2
06128	Cadmium	7440-43-9	0.164		0.0478	0.133	2
06131	Chromium	7440-47-3	17.3		0.159	0.531	2
06132	Cobalt	7440-48-4	6.47		0.0265	0.133	2
06133	Copper	7440-50-8	8.40		0.0876	0.531	2
06135	Lead	7439-92-1	11.0		0.0138	0.265	2
06138	Molybdenum	7439-98-7	0.396		0.0663	0.133	2
06139	Nickel	7440-02-0	11.2		0.133	0.531	2
06141	Selenium	7782-49-2	0.155	J	0.0531	0.531	2
06142	Silver	7440-22-4	0.0333	J	0.0159	0.133	2
06145	Thallium	7440-28-0	0.291		0.0398	0.133	2
06148	Vanadium	7440-62-2	36.5		0.0292	0.133	2
06149	Zinc	7440-66-6	71.6		0.743	3.98	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0761	J	0.0037	0.128	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.9		1.1	1.4	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	12.2	U	12.2	40.6	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.27	U	0.27	1.4	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	344		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-003-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172037
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD003 SDG#: DE046-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.06	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	26.1	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 23:08	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 15:39	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/06/2011 22:22	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 22:40	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 22:54	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 20:50	Lindsey K Lafferty	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	2	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-003-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172037
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD003 SDG#: DE046-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:43	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 06:02	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 11:06	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 11:06	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:42	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 11:06	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:07	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 01:57	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 03:06	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 16:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172038
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U	210	620	1
04688	Benzidine	92-87-5	1,400	U	1,400	4,100	1
04688	Benzoic acid	65-85-0	210	U	210	620	1
04688	Benzyl alcohol	100-51-6	210	U	210	620	1
04688	4-Bromophenyl-phenylether	101-55-3	21	U	21	210	1
04688	Carbazole	86-74-8	21	U	21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	41	U	41	210	1
04688	4-Chloroaniline	106-47-8	82	U	82	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U	21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U	21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U	21	210	1
04688	2-Chloronaphthalene	91-58-7	21	U	21	210	1
04688	2-Chlorophenol	95-57-8	21	U	21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	41	U	41	210	1
04688	Dibenzofuran	132-64-9	21	U	21	210	1
04688	1,2-Dichlorobenzene	95-50-1	21	U	21	210	1
04688	1,3-Dichlorobenzene	541-73-1	21	U	21	210	1
04688	1,4-Dichlorobenzene	106-46-7	21	U	21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	410	1
04688	2,4-Dichlorophenol	120-83-2	21	U	21	210	1
04688	2,4-Dimethylphenol	105-67-9	41	U	41	210	1
04688	3,5-Dimethylphenol	108-68-9	41	U	41	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U	210	620	1
04688	2,4-Dinitrophenol	51-28-5	820	U	820	2,500	1
04688	2,4-Dinitrotoluene	121-14-2	41	U	41	210	1
04688	2,6-Dinitrotoluene	606-20-2	21	U	21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	21	U	21	210	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	23	J	21	410	1
04688	Hexachlorobenzene	118-74-1	21	U	21	210	1
04688	Hexachlorobutadiene	87-68-3	82	U	82	210	1
04688	Hexachlorocyclopentadiene	77-47-4	210	U	210	620	1
04688	Hexachloroethane	67-72-1	21	U	21	210	1
04688	Isophorone	78-59-1	21	U	21	210	1
04688	2-Methylphenol	95-48-7	41	U	41	210	1
04688	4-Methylphenol	106-44-5	41	U	41	210	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	21	U	21	210	1
04688	3-Nitroaniline	99-09-2	41	U	41	210	1
04688	4-Nitroaniline	100-01-6	82	U	82	210	1
04688	Nitrobenzene	98-95-3	21	U	21	210	1
04688	2-Nitrophenol	88-75-5	21	U	21	210	1
04688	4-Nitrophenol	100-02-7	210	U	210	620	1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U	21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	21	U	21	210	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	210	U	210	620	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172038
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	21	U	21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	21	U	21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	41	U	41	210	1
04688	2,4,6-Trichlorophenol	88-06-2	41	U	41	210	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.82	U	0.82	2.1	1
10138	Acenaphthylene	208-96-8	0.41	U	0.41	2.1	1
10138	Anthracene	120-12-7	0.41	U	0.41	2.1	1
10138	Benzo(a)anthracene	56-55-3	0.82	U	0.82	2.1	1
10138	Benzo(a)pyrene	50-32-8	1.2	J	0.82	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	2.6		0.82	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	1.9	J	0.82	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	0.84	J	0.82	2.1	1
10138	Butylbenzylphthalate	85-68-7	7.4	U	7.4	22	1
10138	Di-n-butylphthalate	84-74-2	7.4	U	7.4	22	1
10138	Chrysene	218-01-9	2.6		0.41	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	0.82	U	0.82	2.1	1
10138	Diethylphthalate	84-66-2	7.4	U	7.4	22	1
10138	Dimethylphthalate	131-11-3	7.4	U	7.4	22	1
10138	Fluoranthene	206-44-0	2.6		0.82	2.1	1
10138	Fluorene	86-73-7	0.82	U	0.82	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.4	J	0.82	2.1	1
10138	1-Methylnaphthalene	90-12-0	0.82	U	0.82	2.1	1
10138	2-Methylnaphthalene	91-57-6	0.82	U	0.82	2.1	1
10138	Naphthalene	91-20-3	0.82	U	0.82	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	0.82	U	0.82	2.1	1
10138	Di-n-octylphthalate	117-84-0	15	J	7.4	22	1
10138	Phenanthrene	85-01-8	1.6	J	0.82	2.1	1
10138	Pyrene	129-00-0	2.1		0.82	2.1	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.5	U	1.5	4.4	1
10401	Dalapon	75-99-0	5.4	U	5.4	11	1
10401	2,4-DB	94-82-6	4.6	U	4.6	4.6	1
10401	Dicamba	1918-00-9	0.49	U	0.49	1.5	1
10401	Dinoseb	88-85-7	0.99	U	0.99	3.0	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.99	U	0.99	2.1	1
10401	MCPA	94-74-6	94	U	94	310	1
10401	MCPP (Mecoprop)	93-65-2	93	U	93	310	1
10401	2,4,5-T	93-76-5	0.10	U	0.10	0.21	1
10401	2,4,5-TP	93-72-1	0.093	U	0.093	0.21	1

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172038
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.082	U	0.082	0.21	1
01363	Alpha BHC	319-84-6	0.042	U	0.042	0.21	1
01363	Beta BHC	319-85-7	0.074	U	0.074	0.21	1
01363	Gamma BHC - Lindane	58-89-9	0.042	U	0.042	0.21	1
01363	Chlordane	57-74-9	3.3	U	3.3	4.2	1
01363	p,p-DDD	72-54-8	0.082	U	0.082	0.42	1
01363	p,p-DDE	72-55-9	0.53	U	0.53	0.53	1
01363	p,p-DDT	50-29-3	0.83	U	0.83	0.83	1
01363	Delta BHC	319-86-8	0.044	U	0.044	0.21	1
01363	Dieldrin	60-57-1	0.082	U	0.082	0.42	1
01363	Endosulfan I	959-98-8	0.054	U	0.054	0.21	1
01363	Endosulfan II	33213-65-9	0.15	U	0.15	0.42	1
01363	Endosulfan Sulfate	1031-07-8	0.082	U	0.082	0.42	1
01363	Endrin	72-20-8	0.091	U	0.091	0.42	1
01363	Endrin Aldehyde	7421-93-4	0.19	U	0.19	0.42	1
01363	Endrin Ketone	53494-70-5	0.082	U	0.082	0.42	1
01363	Heptachlor	76-44-8	0.074	U	0.074	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.10	U	0.10	0.21	1
01363	Methoxychlor	72-43-5	0.42	U	0.42	2.1	1
01363	Mirex	2385-85-5	0.10	U	0.10	0.42	1
01363	Toxaphene	8001-35-2	2.7	U	2.7	8.2	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.5	U	2.5	8.2	2
10225	Aroclor 5442	12642-23-8	2.5	U	2.5	8.2	2
10225	Aroclor 5460	11126-42-4	8.0	J	2.5	8.2	2
10225	PCB-1016	12674-11-2	0.82	U	0.82	4.2	2
10225	PCB-1221	11104-28-2	1.2	U	1.2	4.2	2
10225	PCB-1232	11141-16-5	1.3	U	1.3	4.2	2
10225	PCB-1242	53469-21-9	1.2	U	1.2	4.2	2
10225	PCB-1248	12672-29-6	0.82	U	0.82	4.2	2
10225	PCB-1254	11097-69-1	12		0.82	4.2	2
10225	PCB-1260	11096-82-5	4.2	J	0.82	4.2	2
10225	PCB-1262	37324-23-5	0.82	U	0.82	4.2	2
10225	PCB-1268	11100-14-4	0.82	U	0.82	4.2	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,200		6.04	24.0	1
07914	Boron	7440-42-8	4.11	J	1.07	6.00	1
01650	Calcium	7440-70-2	2,560		7.36	24.0	1
01654	Iron	7439-89-6	19,200		5.65	24.0	1
01656	Lithium	7439-93-2	22.6		0.26	2.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172038
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,420		3.05	12.0	1
06958	Manganese	7439-96-5	287		0.0936	0.600	1
10145	Phosphorus	7723-14-0	451		0.672	12.0	1
01662	Potassium	7440-09-7	3,360		21.6	60.0	1
01667	Sodium	7440-23-5	75.7	J	44.8	120	1
07968	Strontium	7440-24-6	15.8		0.0744	0.600	1
06969	Tin	7440-31-5	2.32	J	1.20	12.0	1
06970	Titanium	7440-32-6	1,140		0.456	1.20	1
10146	Zirconium	7440-67-7	1.01	U	1.01	6.00	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.166	J	0.0720	0.240	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.63		0.0720	0.480	2
06126	Barium	7440-39-3	113		0.130	0.480	2
06127	Beryllium	7440-41-7	0.649		0.0192	0.120	2
06128	Cadmium	7440-43-9	0.224		0.0432	0.120	2
06131	Chromium	7440-47-3	25.3		0.144	0.480	2
06132	Cobalt	7440-48-4	6.97		0.0240	0.120	2
06133	Copper	7440-50-8	11.0		0.0792	0.480	2
06135	Lead	7439-92-1	16.5		0.0125	0.240	2
06138	Molybdenum	7439-98-7	0.819		0.0600	0.120	2
06139	Nickel	7440-02-0	17.6		0.120	0.480	2
06141	Selenium	7782-49-2	0.199	J	0.0480	0.480	2
06142	Silver	7440-22-4	0.0489	J	0.0144	0.120	2
06145	Thallium	7440-28-0	0.358		0.0360	0.120	2
06148	Vanadium	7440-62-2	43.7		0.0264	0.120	2
06149	Zinc	7440-66-6	82.4		0.672	3.60	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0309	J	0.0035	0.120	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.6		0.99	1.2	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.1	U	11.1	37.1	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.60	J	0.25	1.2	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	434		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172038
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.64	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	19.1	0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 10:18	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/10/2011 23:05	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/06/2011 22:50	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 23:08	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 21:08	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	2	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172038
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:26	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 05:27	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 10:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 10:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 10:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:09	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 00:07	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 01:10	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 11:10	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172039
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900		21	210	1
04688	Acenaphthylene	208-96-8	1,900		21	210	1
04688	Aniline	62-53-3	1,200		210	620	1
04688	Anthracene	120-12-7	1,900		21	210	1
04688	Benzidine	92-87-5	3,600	J	1,400	4,100	1
04688	Benzo(a)anthracene	56-55-3	1,900		21	210	1
04688	Benzo(a)pyrene	50-32-8	1,700		21	210	1
04688	Benzo(b)fluoranthene	205-99-2	1,800		21	210	1
04688	Benzo(g,h,i)perylene	191-24-2	1,500		21	210	1
04688	Benzo(k)fluoranthene	207-08-9	1,700		21	210	1
04688	Benzoic acid	65-85-0	1,900		210	620	1
04688	Benzyl alcohol	100-51-6	1,800		210	620	1
04688	4-Bromophenyl-phenylether	101-55-3	1,800		21	210	1
04688	Butylbenzylphthalate	85-68-7	2,100		21	210	1
04688	Di-n-butylphthalate	84-74-2	1,900		21	210	1
04688	Carbazole	86-74-8	1,900		21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	1,900		41	210	1
04688	4-Chloroaniline	106-47-8	1,500		82	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,900		21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700		21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,800		21	210	1
04688	2-Chloronaphthalene	91-58-7	1,600		21	210	1
04688	2-Chlorophenol	95-57-8	1,800		21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,800		41	210	1
04688	Chrysene	218-01-9	1,900		21	210	1
04688	Dibenz(a,h)anthracene	53-70-3	1,600		21	210	1
04688	Dibenzofuran	132-64-9	1,800		21	210	1
04688	1,2-Dichlorobenzene	95-50-1	1,800		21	210	1
04688	1,3-Dichlorobenzene	541-73-1	1,700		21	210	1
04688	1,4-Dichlorobenzene	106-46-7	1,800		21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,600		120	410	1
04688	2,4-Dichlorophenol	120-83-2	1,800		21	210	1
04688	Diethylphthalate	84-66-2	1,800		21	210	1
04688	2,4-Dimethylphenol	105-67-9	1,900		41	210	1
04688	3,5-Dimethylphenol	108-68-9	2,100		41	210	1
04688	Dimethylphthalate	131-11-3	1,900		21	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,600		210	620	1
04688	2,4-Dinitrophenol	51-28-5	2,800		820	2,500	1
04688	2,4-Dinitrotoluene	121-14-2	1,900		41	210	1
04688	2,6-Dinitrotoluene	606-20-2	1,900		21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	2,000		21	210	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,100		21	410	1
04688	Fluoranthene	206-44-0	1,900		21	210	1
04688	Fluorene	86-73-7	1,800		21	210	1
04688	Hexachlorobenzene	118-74-1	1,900		21	210	1
04688	Hexachlorobutadiene	87-68-3	2,000		82	210	1
04688	Hexachlorocyclopentadiene	77-47-4	3,300		210	620	1
04688	Hexachloroethane	67-72-1	1,900		21	210	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600		21	210	1
04688	Isophorone	78-59-1	1,800		21	210	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172039
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,800	21	210	1
04688	2-Methylnaphthalene	91-57-6	1,700	21	210	1
04688	2-Methylphenol	95-48-7	1,800	41	210	1
04688	4-Methylphenol	106-44-5	1,700	41	210	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,700	21	210	1
04688	2-Nitroaniline	88-74-4	2,100	21	210	1
04688	3-Nitroaniline	99-09-2	1,900	41	210	1
04688	4-Nitroaniline	100-01-6	1,500	82	210	1
04688	Nitrobenzene	98-95-3	2,000	21	210	1
04688	2-Nitrophenol	88-75-5	1,900	21	210	1
04688	4-Nitrophenol	100-02-7	2,000	210	620	1
04688	N-Nitrosodimethylamine	62-75-9	1,500	41	210	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800	21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	1,900	21	210	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	2,000	21	210	1
04688	Pentachlorophenol	87-86-5	1,600	210	620	1
04688	Phenanthrene	85-01-8	1,800	21	210	1
04688	Phenol	108-95-2	1,800	21	210	1
04688	Pyrene	129-00-0	2,100	21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,800	21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	2,000	41	210	1
04688	2,4,6-Trichlorophenol	88-06-2	2,100	41	210	1
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	40	0.82	2.1	1
10138	Acenaphthylene	208-96-8	38	0.41	2.1	1
10138	Anthracene	120-12-7	40	0.41	2.1	1
10138	Benzo(a)anthracene	56-55-3	42	0.82	2.1	1
10138	Benzo(a)pyrene	50-32-8	40	0.82	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	46	0.82	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	31	0.82	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	41	0.82	2.1	1
10138	Butylbenzylphthalate	85-68-7	49	7.4	22	1
10138	Di-n-butylphthalate	84-74-2	46	7.4	22	1
10138	Chrysene	218-01-9	39	0.41	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	34	0.82	2.1	1
10138	Diethylphthalate	84-66-2	42	7.4	22	1
10138	Dimethylphthalate	131-11-3	42	7.4	22	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	54	7.4	22	1
10138	Fluoranthene	206-44-0	43	0.82	2.1	1
10138	Fluorene	86-73-7	40	0.82	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	35	0.82	2.1	1
10138	1-Methylnaphthalene	90-12-0	39	0.82	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172039
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	36		0.82	2.1	1
10138	Naphthalene	91-20-3	39		0.82	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	42		0.82	2.1	1
10138	Di-n-octylphthalate	117-84-0	52		7.4	22	1
10138	Phenanthrene	85-01-8	40		0.82	2.1	1
10138	Pyrene	129-00-0	38		0.82	2.1	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	11		1.5	4.4	1
10401	Dalapon	75-99-0	23		5.4	11	1
10401	2,4-DB	94-82-6	11		0.77	2.1	1
10401	Dicamba	1918-00-9	0.84	J	0.49	1.5	1
10401	Dinoseb	88-85-7	2.1	J	0.99	3.0	1
10401	2,4-DP (Dichlorprop)	120-36-5	10		0.99	2.1	1
10401	MCPA	94-74-6	1,500		94	310	1
10401	MCPP (Mecoprop)	93-65-2	900		93	310	1
10401	2,4,5-T	93-76-5	0.58		0.10	0.21	1
10401	2,4,5-TP	93-72-1	0.84		0.093	0.21	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.31		0.082	0.21	1
01363	Alpha BHC	319-84-6	0.21		0.042	0.21	1
01363	Beta BHC	319-85-7	0.28		0.074	0.21	1
01363	Gamma BHC - Lindane	58-89-9	0.23		0.042	0.21	1
01363	Chlordane	57-74-9	0.99	U	0.99	4.2	1
01363	p,p-DDD	72-54-8	0.68		0.082	0.42	1
01363	p,p-DDE	72-55-9	1.5		0.082	0.42	1
01363	p,p-DDT	50-29-3	1.0		0.082	0.42	1
01363	Delta BHC	319-86-8	0.27		0.044	0.21	1
01363	Dieldrin	60-57-1	0.53		0.082	0.42	1
01363	Endosulfan I	959-98-8	0.22		0.054	0.21	1
01363	Endosulfan II	33213-65-9	0.56		0.082	0.42	1
01363	Endosulfan Sulfate	1031-07-8	0.69		0.082	0.42	1
01363	Endrin	72-20-8	0.53		0.082	0.42	1
01363	Endrin Aldehyde	7421-93-4	0.48		0.082	0.42	1
01363	Endrin Ketone	53494-70-5	0.52		0.082	0.42	1
01363	Heptachlor	76-44-8	0.23		0.074	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.33		0.042	0.21	1
01363	Methoxychlor	72-43-5	2.5		0.42	2.1	1
01363	Mirex	2385-85-5	0.082	U	0.082	0.42	1
01363	Toxaphene	8001-35-2	2.7	U	2.7	8.2	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.5	U	2.5	8.2	2
10225	Aroclor 5442	12642-23-8	2.5	U	2.5	8.2	2
10225	Aroclor 5460	11126-42-4	2.5	U	2.5	8.2	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172039
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	PCB-1016	12674-11-2	21		0.82	4.2	2
10225	PCB-1221	11104-28-2	1.2	U	1.2	4.2	2
10225	PCB-1232	11141-16-5	1.3	U	1.3	4.2	2
10225	PCB-1242	53469-21-9	1.2	U	1.2	4.2	2
10225	PCB-1248	12672-29-6	0.82	U	0.82	4.2	2
10225	PCB-1254	11097-69-1	9.2		0.82	4.2	2
10225	PCB-1260	11096-82-5	35		0.82	4.2	2
10225	PCB-1262	37324-23-5	0.82	U	0.82	4.2	2
10225	PCB-1268	11100-14-4	0.82	U	0.82	4.2	2
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,800		6.10	24.2	1
07914	Boron	7440-42-8	231		1.08	6.06	1
01650	Calcium	7440-70-2	3,380		7.43	24.2	1
01654	Iron	7439-89-6	19,900		5.71	24.2	1
01656	Lithium	7439-93-2	140		0.27	2.4	1
01657	Magnesium	7439-95-4	4,860		3.08	12.1	1
06958	Manganese	7439-96-5	352		0.0945	0.606	1
10145	Phosphorus	7723-14-0	576		0.679	12.1	1
01662	Potassium	7440-09-7	4,580		21.8	60.6	1
01667	Sodium	7440-23-5	1,250		45.2	121	1
07968	Strontium	7440-24-6	133		0.0751	0.606	1
06969	Tin	7440-31-5	441		1.21	12.1	1
06970	Titanium	7440-32-6	1,410		0.461	1.21	1
10146	Zirconium	7440-67-7	109		1.02	6.06	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.746		0.0727	0.242	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.14		0.0727	0.485	2
06126	Barium	7440-39-3	125		0.131	0.485	2
06127	Beryllium	7440-41-7	1.82		0.0194	0.121	2
06128	Cadmium	7440-43-9	1.79		0.0436	0.121	2
06131	Chromium	7440-47-3	37.2		0.145	0.485	2
06132	Cobalt	7440-48-4	80.1		0.0242	0.121	2
06133	Copper	7440-50-8	25.3		0.0800	0.485	2
06135	Lead	7439-92-1	21.7		0.0126	0.242	2
06138	Molybdenum	7439-98-7	17.0		0.0606	0.121	2
06139	Nickel	7440-02-0	33.3		0.121	0.485	2
06141	Selenium	7782-49-2	2.37		0.0485	0.485	2
06142	Silver	7440-22-4	15.2		0.0145	0.121	2
06145	Thallium	7440-28-0	0.983		0.0364	0.121	2
06148	Vanadium	7440-62-2	56.9		0.0267	0.121	2
06149	Zinc	7440-66-6	94.6		0.679	3.64	2

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172039
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 7471A**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.233	0.0034	0.119	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.2	0.99	1.2	1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	622	11.1	37.1	1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	42.2	1.2	6.2	5
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3	n.a.	19.1	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 10:53	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/10/2011 23:37	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/06/2011 23:18	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 23:22	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 21:27	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	2	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172039
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 05:39	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 10:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 10:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:36	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 10:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:11	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 00:44	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 02:20	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 11:26	Ashley M Adams	5
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172040
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	2,000		21	210	1
04688	Acenaphthylene	208-96-8	2,100		21	210	1
04688	Aniline	62-53-3	1,400		210	620	1
04688	Anthracene	120-12-7	2,000		21	210	1
04688	Benzidine	92-87-5	2,000	J	1,400	4,100	1
04688	Benzo(a)anthracene	56-55-3	1,900		21	210	1
04688	Benzo(a)pyrene	50-32-8	1,700		21	210	1
04688	Benzo(b)fluoranthene	205-99-2	1,800		21	210	1
04688	Benzo(g,h,i)perylene	191-24-2	1,600		21	210	1
04688	Benzo(k)fluoranthene	207-08-9	1,800		21	210	1
04688	Benzoic acid	65-85-0	2,000		210	620	1
04688	Benzyl alcohol	100-51-6	1,800		210	620	1
04688	4-Bromophenyl-phenylether	101-55-3	1,900		21	210	1
04688	Butylbenzylphthalate	85-68-7	2,100		21	210	1
04688	Di-n-butylphthalate	84-74-2	1,900		21	210	1
04688	Carbazole	86-74-8	2,000		21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	1,900		41	210	1
04688	4-Chloroaniline	106-47-8	1,700		82	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	2,000		21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700		21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,800		21	210	1
04688	2-Chloronaphthalene	91-58-7	1,800		21	210	1
04688	2-Chlorophenol	95-57-8	1,900		21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	2,000		41	210	1
04688	Chrysene	218-01-9	1,900		21	210	1
04688	Dibenz(a,h)anthracene	53-70-3	1,600		21	210	1
04688	Dibenzofuran	132-64-9	2,000		21	210	1
04688	1,2-Dichlorobenzene	95-50-1	1,800		21	210	1
04688	1,3-Dichlorobenzene	541-73-1	1,800		21	210	1
04688	1,4-Dichlorobenzene	106-46-7	1,800		21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,700		120	410	1
04688	2,4-Dichlorophenol	120-83-2	2,000		21	210	1
04688	Diethylphthalate	84-66-2	2,000		21	210	1
04688	2,4-Dimethylphenol	105-67-9	1,900		41	210	1
04688	3,5-Dimethylphenol	108-68-9	2,100		41	210	1
04688	Dimethylphthalate	131-11-3	1,900		21	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,600		210	620	1
04688	2,4-Dinitrophenol	51-28-5	2,700		820	2,500	1
04688	2,4-Dinitrotoluene	121-14-2	2,000		41	210	1
04688	2,6-Dinitrotoluene	606-20-2	2,000		21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	2,100		21	210	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000		21	410	1
04688	Fluoranthene	206-44-0	2,000		21	210	1
04688	Fluorene	86-73-7	1,900		21	210	1
04688	Hexachlorobenzene	118-74-1	2,000		21	210	1
04688	Hexachlorobutadiene	87-68-3	2,100		82	210	1
04688	Hexachlorocyclopentadiene	77-47-4	3,500		210	620	1
04688	Hexachloroethane	67-72-1	1,900		21	210	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600		21	210	1
04688	Isophorone	78-59-1	1,900		21	210	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172040
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,900	21	210	1
04688	2-Methylnaphthalene	91-57-6	1,800	21	210	1
04688	2-Methylphenol	95-48-7	1,900	41	210	1
04688	4-Methylphenol	106-44-5	1,800	41	210	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,800	21	210	1
04688	2-Nitroaniline	88-74-4	2,300	21	210	1
04688	3-Nitroaniline	99-09-2	2,000	41	210	1
04688	4-Nitroaniline	100-01-6	1,900	82	210	1
04688	Nitrobenzene	98-95-3	2,000	21	210	1
04688	2-Nitrophenol	88-75-5	1,900	21	210	1
04688	4-Nitrophenol	100-02-7	2,200	210	620	1
04688	N-Nitrosodimethylamine	62-75-9	1,600	41	210	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800	21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	2,000	21	210	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,900	21	210	1
04688	Pentachlorophenol	87-86-5	1,600	210	620	1
04688	Phenanthrene	85-01-8	1,900	21	210	1
04688	Phenol	108-95-2	1,900	21	210	1
04688	Pyrene	129-00-0	2,100	21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	2,000	21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	2,100	41	210	1
04688	2,4,6-Trichlorophenol	88-06-2	2,200	41	210	1
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	40	0.82	2.1	1
10138	Acenaphthylene	208-96-8	40	0.41	2.1	1
10138	Anthracene	120-12-7	39	0.41	2.1	1
10138	Benzo(a)anthracene	56-55-3	45	0.82	2.1	1
10138	Benzo(a)pyrene	50-32-8	42	0.82	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	47	0.82	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	28	0.82	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	45	0.82	2.1	1
10138	Butylbenzylphthalate	85-68-7	53	7.4	22	1
10138	Di-n-butylphthalate	84-74-2	46	7.4	22	1
10138	Chrysene	218-01-9	41	0.41	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	32	0.82	2.1	1
10138	Diethylphthalate	84-66-2	46	7.4	22	1
10138	Dimethylphthalate	131-11-3	46	7.4	22	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	65	7.4	22	1
10138	Fluoranthene	206-44-0	44	0.82	2.1	1
10138	Fluorene	86-73-7	43	0.82	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	32	0.82	2.1	1
10138	1-Methylnaphthalene	90-12-0	38	0.82	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172040
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	35		0.82	2.1	1
10138	Naphthalene	91-20-3	41		0.82	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	9.5		0.82	2.1	1
10138	Di-n-octylphthalate	117-84-0	55		7.4	22	1
10138	Phenanthrene	85-01-8	41		0.82	2.1	1
10138	Pyrene	129-00-0	40		0.82	2.1	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	12		1.5	4.4	1
10401	Dalapon	75-99-0	24		5.4	11	1
10401	2,4-DB	94-82-6	12		0.77	2.1	1
10401	Dicamba	1918-00-9	0.69	J	0.49	1.5	1
10401	Dinoseb	88-85-7	2.8	J	0.99	3.0	1
10401	2,4-DP (Dichlorprop)	120-36-5	10		0.99	2.1	1
10401	MCPA	94-74-6	1,600		94	310	1
10401	MCPP (Mecoprop)	93-65-2	950		93	310	1
10401	2,4,5-T	93-76-5	0.61		0.10	0.21	1
10401	2,4,5-TP	93-72-1	0.87		0.093	0.21	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.41		0.082	0.21	1
01363	Alpha BHC	319-84-6	0.31		0.042	0.21	1
01363	Beta BHC	319-85-7	0.23		0.074	0.21	1
01363	Gamma BHC - Lindane	58-89-9	0.35		0.042	0.21	1
01363	Chlordane	57-74-9	0.99	U	0.99	4.2	1
01363	p,p-DDD	72-54-8	1.2		0.082	0.42	1
01363	p,p-DDE	72-55-9	1.9		0.082	0.42	1
01363	p,p-DDT	50-29-3	1.5		0.082	0.42	1
01363	Delta BHC	319-86-8	0.42		0.044	0.21	1
01363	Dieldrin	60-57-1	0.80		0.082	0.42	1
01363	Endosulfan I	959-98-8	0.32		0.054	0.21	1
01363	Endosulfan II	33213-65-9	0.94		0.082	0.42	1
01363	Endosulfan Sulfate	1031-07-8	0.98		0.082	0.42	1
01363	Endrin	72-20-8	0.83		0.082	0.42	1
01363	Endrin Aldehyde	7421-93-4	0.93		0.082	0.42	1
01363	Endrin Ketone	53494-70-5	0.78		0.082	0.42	1
01363	Heptachlor	76-44-8	0.36		0.074	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.52		0.042	0.21	1
01363	Methoxychlor	72-43-5	4.0		0.42	2.1	1
01363	Mirex	2385-85-5	0.082	U	0.082	0.42	1
01363	Toxaphene	8001-35-2	2.7	U	2.7	8.2	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.5	U	2.5	8.2	2
10225	Aroclor 5442	12642-23-8	2.5	U	2.5	8.2	2
10225	Aroclor 5460	11126-42-4	9.8		2.5	8.2	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172040
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	PCB-1016	12674-11-2	23		0.82	4.2	2
10225	PCB-1221	11104-28-2	1.2	U	1.2	4.2	2
10225	PCB-1232	11141-16-5	1.3	U	1.3	4.2	2
10225	PCB-1242	53469-21-9	1.2	U	1.2	4.2	2
10225	PCB-1248	12672-29-6	0.82	U	0.82	4.2	2
10225	PCB-1254	11097-69-1	17		0.82	4.2	2
10225	PCB-1260	11096-82-5	32		0.82	4.2	2
10225	PCB-1262	37324-23-5	0.82	U	0.82	4.2	2
10225	PCB-1268	11100-14-4	0.82	U	0.82	4.2	2
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,300		6.10	24.2	1
07914	Boron	7440-42-8	233		1.08	6.06	1
01650	Calcium	7440-70-2	3,270		7.43	24.2	1
01654	Iron	7439-89-6	19,200		5.71	24.2	1
01656	Lithium	7439-93-2	142		0.27	2.4	1
01657	Magnesium	7439-95-4	4,750		3.08	12.1	1
06958	Manganese	7439-96-5	345		0.0945	0.606	1
10145	Phosphorus	7723-14-0	551		0.679	12.1	1
01662	Potassium	7440-09-7	4,520		21.8	60.6	1
01667	Sodium	7440-23-5	1,270		45.2	121	1
07968	Strontium	7440-24-6	135		0.0751	0.606	1
06969	Tin	7440-31-5	445		1.21	12.1	1
06970	Titanium	7440-32-6	1,380		0.461	1.21	1
10146	Zirconium	7440-67-7	111		1.02	6.06	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.827		0.0727	0.242	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.90		0.0727	0.485	2
06126	Barium	7440-39-3	140		0.131	0.485	2
06127	Beryllium	7440-41-7	1.77		0.0194	0.121	2
06128	Cadmium	7440-43-9	1.75		0.0436	0.121	2
06131	Chromium	7440-47-3	36.9		0.145	0.485	2
06132	Cobalt	7440-48-4	79.9		0.0242	0.121	2
06133	Copper	7440-50-8	24.2		0.0800	0.485	2
06135	Lead	7439-92-1	18.2		0.0126	0.242	2
06138	Molybdenum	7439-98-7	17.2		0.0606	0.121	2
06139	Nickel	7440-02-0	34.7		0.121	0.485	2
06141	Selenium	7782-49-2	2.34		0.0485	0.485	2
06142	Silver	7440-22-4	15.1		0.0145	0.121	2
06145	Thallium	7440-28-0	0.944		0.0364	0.121	2
06148	Vanadium	7440-62-2	59.7		0.0267	0.121	2
06149	Zinc	7440-66-6	99.9		0.679	3.64	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172040
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 7471A**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.233	0.0034	0.119	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3	n.a.	19.1	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 11:28	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 00:09	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/07/2011 00:41	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 23:36	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 21:46	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	2	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 05:43	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172040
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 10:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 10:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:37	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 10:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:12	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172041
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,100		6.04	24.0	1
07914	Boron	7440-42-8	4.81	J	1.07	6.00	1
01650	Calcium	7440-70-2	2,680		7.36	24.0	1
01654	Iron	7439-89-6	19,000		5.65	24.0	1
01656	Lithium	7439-93-2	22.6		0.26	2.4	1
01657	Magnesium	7439-95-4	4,470		3.05	12.0	1
06958	Manganese	7439-96-5	283		0.0936	0.600	1
10145	Phosphorus	7723-14-0	469		0.672	12.0	1
01662	Potassium	7440-09-7	3,170		21.6	60.0	1
01667	Sodium	7440-23-5	76.8	J	44.8	120	1
07968	Strontium	7440-24-6	16.4		0.0744	0.600	1
06969	Tin	7440-31-5	2.20	J	1.20	12.0	1
06970	Titanium	7440-32-6	1,100		0.456	1.20	1
10146	Zirconium	7440-67-7	1.56	J	1.01	6.00	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0720	U	0.0720	0.240	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	3.65		0.0720	0.480	2
06126	Barium	7440-39-3	76.4		0.130	0.480	2
06127	Beryllium	7440-41-7	0.499		0.0192	0.120	2
06128	Cadmium	7440-43-9	0.187		0.0432	0.120	2
06131	Chromium	7440-47-3	16.0		0.144	0.480	2
06132	Cobalt	7440-48-4	4.87		0.0240	0.120	2
06133	Copper	7440-50-8	7.80		0.0792	0.480	2
06135	Lead	7439-92-1	12.7		0.0125	0.240	2
06138	Molybdenum	7439-98-7	0.535		0.0600	0.120	2
06139	Nickel	7440-02-0	11.1		0.120	0.480	2
06141	Selenium	7782-49-2	0.181	J	0.0480	0.480	2
06142	Silver	7440-22-4	0.0469	J	0.0144	0.120	2
06145	Thallium	7440-28-0	0.233		0.0360	0.120	2
06148	Vanadium	7440-62-2	30.5		0.0264	0.120	2
06149	Zinc	7440-66-6	56.5		0.672	3.60	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0363	J	0.0034	0.119	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.5		0.99	1.2	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	35.8	J	11.1	37.1	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.75	J	0.25	1.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172041
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03DUP

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	430	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	6.50	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3		n.a.	19.1	0.50	0.50	1
11626	28a Moisture Content by 160.3		n.a.	20.3	0.50	0.50	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:33	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 05:35	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 10:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172041
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD005 SDG#: DE046-03DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 10:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:34	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 10:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:10	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 00:25	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 01:57	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 12:14	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-007-SIV-SD-0.0-0.6 Soil
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172042
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD007 SDG#: DE046-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U	200	610	1
04688	Benzidine	92-87-5	1,400	U	1,400	4,100	1
04688	Benzo(g,h,i)perylene	191-24-2	22	J	20	200	1
04688	Benzoic acid	65-85-0	200	U	200	610	1
04688	Benzyl alcohol	100-51-6	200	U	200	610	1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200	1
04688	Carbazole	86-74-8	20	U	20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	41	U	41	200	1
04688	4-Chloroaniline	106-47-8	81	U	81	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200	1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200	1
04688	2-Chlorophenol	95-57-8	20	U	20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	41	U	41	200	1
04688	Dibenzofuran	132-64-9	20	U	20	200	1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200	1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200	1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	410	1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200	1
04688	2,4-Dimethylphenol	105-67-9	41	U	41	200	1
04688	3,5-Dimethylphenol	108-68-9	41	U	41	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	610	1
04688	2,4-Dinitrophenol	51-28-5	810	U	810	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	41	U	41	200	1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200	1
04688	Hexachlorobenzene	118-74-1	20	U	20	200	1
04688	Hexachlorobutadiene	87-68-3	81	U	81	200	1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	610	1
04688	Hexachloroethane	67-72-1	20	U	20	200	1
04688	Isophorone	78-59-1	20	U	20	200	1
04688	2-Methylphenol	95-48-7	41	U	41	200	1
04688	4-Methylphenol	106-44-5	41	U	41	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U	20	200	1
04688	3-Nitroaniline	99-09-2	41	U	41	200	1
04688	4-Nitroaniline	100-01-6	81	U	81	200	1
04688	Nitrobenzene	98-95-3	20	U	20	200	1
04688	2-Nitrophenol	88-75-5	20	U	20	200	1
04688	4-Nitrophenol	100-02-7	200	U	200	610	1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U	200	610	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-007-SIV-SD-0.0-0.6 Soil
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172042
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD007 SDG#: DE046-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	20	U	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	41	U	41	200	1
04688	2,4,6-Trichlorophenol	88-06-2	41	U	41	200	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.81	U	0.81	2.0	1
10138	Acenaphthylene	208-96-8	0.41	U	0.41	2.0	1
10138	Anthracene	120-12-7	0.69	J	0.41	2.0	1
10138	Benzo(a)anthracene	56-55-3	0.81	U	0.81	2.0	1
10138	Benzo(a)pyrene	50-32-8	10		0.81	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	35		0.81	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	0.81	U	0.81	2.0	1
10138	Butylbenzylphthalate	85-68-7	14	J	7.3	22	1
10138	Di-n-butylphthalate	84-74-2	7.3	U	7.3	22	1
10138	Chrysene	218-01-9	29		0.41	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	5.7		0.81	2.0	1
10138	Diethylphthalate	84-66-2	7.3	U	7.3	22	1
10138	Dimethylphthalate	131-11-3	7.3	U	7.3	22	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	28		7.3	22	1
10138	Fluoranthene	206-44-0	3.8		0.81	2.0	1
10138	Fluorene	86-73-7	0.81	U	0.81	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	5.9		0.81	2.0	1
10138	1-Methylnaphthalene	90-12-0	0.81	U	0.81	2.0	1
10138	2-Methylnaphthalene	91-57-6	0.81	U	0.81	2.0	1
10138	Naphthalene	91-20-3	0.86	J	0.81	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	0.81	U	0.81	2.0	1
10138	Di-n-octylphthalate	117-84-0	7.3	U	7.3	22	1
10138	Phenanthrene	85-01-8	1.4	J	0.81	2.0	1
10138	Pyrene	129-00-0	6.8		0.81	2.0	1
	The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.5	U	1.5	4.4	1
10401	Dalapon	75-99-0	5.4	U	5.4	11	1
10401	2,4-DB	94-82-6	2.3		0.75	2.1	1
10401	Dicamba	1918-00-9	0.49	U	0.49	1.5	1
10401	Dinoseb	88-85-7	0.97	U	0.97	2.9	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.97	U	0.97	2.1	1
10401	MCPA	94-74-6	92	U	92	300	1
10401	MCPP (Mecoprop)	93-65-2	91	U	91	300	1
10401	2,4,5-T	93-76-5	0.10	U	0.10	0.21	1
10401	2,4,5-TP	93-72-1	0.091	U	0.091	0.21	1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.080	U	0.080	0.20	1
01363	Alpha BHC	319-84-6	0.041	U	0.041	0.20	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-007-SIV-SD-0.0-0.6 Soil
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172042
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD007 SDG#: DE046-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Beta BHC	319-85-7	0.073	U	0.073	0.20	1
01363	Gamma BHC - Lindane	58-89-9	0.060	J	0.041	0.20	1
01363	Chlordane	57-74-9	5.7	U	5.7	5.7	1
01363	p,p-DDD	72-54-8	0.080	U	0.080	0.41	1
01363	p,p-DDE	72-55-9	1.6		0.080	0.41	1
01363	p,p-DDT	50-29-3	3.8		0.40	2.1	5
01363	Delta BHC	319-86-8	0.044	U	0.044	0.20	1
01363	Dieldrin	60-57-1	0.32	U	0.32	0.41	1
01363	Endosulfan I	959-98-8	0.054	U	0.054	0.20	1
01363	Endosulfan II	33213-65-9	0.080	U	0.080	0.41	1
01363	Endosulfan Sulfate	1031-07-8	0.080	U	0.080	0.41	1
01363	Endrin	72-20-8	0.19	U	0.19	0.41	1
01363	Endrin Aldehyde	7421-93-4	0.79	U	0.79	0.79	1
01363	Endrin Ketone	53494-70-5	0.080	U	0.080	0.41	1
01363	Heptachlor	76-44-8	0.12	U	0.12	0.20	1
01363	Heptachlor Epoxide	1024-57-3	0.24	U	0.24	0.24	1
01363	Methoxychlor	72-43-5	0.41	U	0.41	2.0	1
01363	Mirex	2385-85-5	0.080	U	0.080	0.41	1
01363	Toxaphene	8001-35-2	2.7	U	2.7	8.0	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.4	U	2.4	8.0	2
10225	Aroclor 5442	12642-23-8	2.4	U	2.4	8.0	2
10225	Aroclor 5460	11126-42-4	9.6		2.4	8.0	2
10225	PCB-1016	12674-11-2	0.80	U	0.80	4.1	2
10225	PCB-1221	11104-28-2	1.2	U	1.2	4.1	2
10225	PCB-1232	11141-16-5	1.3	U	1.3	4.1	2
10225	PCB-1242	53469-21-9	1.2	U	1.2	4.1	2
10225	PCB-1248	12672-29-6	0.80	U	0.80	4.1	2
10225	PCB-1254	11097-69-1	3.1	J	0.80	4.1	2
10225	PCB-1260	11096-82-5	27		0.80	4.1	2
10225	PCB-1262	37324-23-5	0.80	U	0.80	4.1	2
10225	PCB-1268	11100-14-4	0.80	U	0.80	4.1	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**	**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,300	5.94	23.6	1
07914	Boron	7440-42-8	7.37	1.05	5.91	1
01650	Calcium	7440-70-2	3,980	7.24	23.6	1
01654	Iron	7439-89-6	17,200	5.56	23.6	1
01656	Lithium	7439-93-2	18.2	0.26	2.4	1
01657	Magnesium	7439-95-4	3,910	3.00	11.8	1
06958	Manganese	7439-96-5	277	0.0921	0.591	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-007-SIV-SD-0.0-0.6 Soil
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172042
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD007 SDG#: DE046-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
10145	Phosphorus	7723-14-0	427		0.661	11.8	1
01662	Potassium	7440-09-7	2,880		21.3	59.1	1
01667	Sodium	7440-23-5	69.5	J	44.1	118	1
07968	Strontium	7440-24-6	24.3		0.0732	0.591	1
06969	Tin	7440-31-5	2.36	J	1.18	11.8	1
06970	Titanium	7440-32-6	906		0.449	1.18	1
10146	Zirconium	7440-67-7	1.02	J	0.992	5.91	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.145	J	0.0702	0.234	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.12		0.0702	0.468	2
06126	Barium	7440-39-3	96.6		0.126	0.468	2
06127	Beryllium	7440-41-7	0.439		0.0187	0.117	2
06128	Cadmium	7440-43-9	0.305		0.0421	0.117	2
06131	Chromium	7440-47-3	16.5		0.140	0.468	2
06132	Cobalt	7440-48-4	5.12		0.0234	0.117	2
06133	Copper	7440-50-8	10.8		0.0772	0.468	2
06135	Lead	7439-92-1	11.7		0.0122	0.234	2
06138	Molybdenum	7439-98-7	0.495		0.0585	0.117	2
06139	Nickel	7440-02-0	12.8		0.117	0.468	2
06141	Selenium	7782-49-2	0.168	J	0.0468	0.468	2
06142	Silver	7440-22-4	0.0542	J	0.0140	0.117	2
06145	Thallium	7440-28-0	0.234		0.0351	0.117	2
06148	Vanadium	7440-62-2	32.3		0.0257	0.117	2
06149	Zinc	7440-66-6	111		0.655	3.51	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0257	J	0.0033	0.114	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.9		0.97	1.2	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.9	U	10.9	36.5	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.24	U	0.24	1.2	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	471		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						

*=This limit was used in the evaluation of the final result

Sample Description: SED-007-SIV-SD-0.0-0.6 Soil
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172042
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD007 SDG#: DE046-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.88	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	17.8	0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/18/2011 23:43	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/11/2011 16:11	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/07/2011 01:09	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/14/2011 23:50	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/22/2011 23:00	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 22:04	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	2	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-007-SIV-SD-0.0-0.6 Soil
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172042
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD007 SDG#: DE046-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:47	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 06:06	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 11:15	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 11:15	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:46	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 11:15	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:13	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 02:16	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 03:29	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 16:23	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-008-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172043
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD008 SDG#: DE046-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	250	U	250	740	1
04688	Benzidine	92-87-5	1,700	U	1,700	5,000	1
04688	Benzoic acid	65-85-0	250	U	250	740	1
04688	Benzyl alcohol	100-51-6	250	U	250	740	1
04688	4-Bromophenyl-phenylether	101-55-3	25	U	25	250	1
04688	Carbazole	86-74-8	25	U	25	250	1
04688	4-Chloro-3-methylphenol	59-50-7	50	U	50	250	1
04688	4-Chloroaniline	106-47-8	99	U	99	250	1
04688	bis(2-Chloroethoxy)methane	111-91-1	25	U	25	250	1
04688	bis(2-Chloroethyl)ether	111-44-4	25	U	25	250	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	25	U	25	250	1
04688	2-Chloronaphthalene	91-58-7	25	U	25	250	1
04688	2-Chlorophenol	95-57-8	25	U	25	250	1
04688	4-Chlorophenyl-phenylether	7005-72-3	50	U	50	250	1
04688	Dibenzofuran	132-64-9	25	U	25	250	1
04688	1,2-Dichlorobenzene	95-50-1	25	U	25	250	1
04688	1,3-Dichlorobenzene	541-73-1	25	U	25	250	1
04688	1,4-Dichlorobenzene	106-46-7	25	U	25	250	1
04688	3,3'-Dichlorobenzidine	91-94-1	150	U	150	500	1
04688	2,4-Dichlorophenol	120-83-2	25	U	25	250	1
04688	2,4-Dimethylphenol	105-67-9	50	U	50	250	1
04688	3,5-Dimethylphenol	108-68-9	50	U	50	250	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	250	U	250	740	1
04688	2,4-Dinitrophenol	51-28-5	990	U	990	3,000	1
04688	2,4-Dinitrotoluene	121-14-2	50	U	50	250	1
04688	2,6-Dinitrotoluene	606-20-2	25	U	25	250	1
04688	1,2-Diphenylhydrazine	122-66-7	25	U	25	250	1
04688	Hexachlorobenzene	118-74-1	25	U	25	250	1
04688	Hexachlorobutadiene	87-68-3	99	U	99	250	1
04688	Hexachlorocyclopentadiene	77-47-4	250	U	250	740	1
04688	Hexachloroethane	67-72-1	25	U	25	250	1
04688	Isophorone	78-59-1	25	U	25	250	1
04688	2-Methylphenol	95-48-7	50	U	50	250	1
04688	4-Methylphenol	106-44-5	50	U	50	250	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	25	U	25	250	1
04688	3-Nitroaniline	99-09-2	50	U	50	250	1
04688	4-Nitroaniline	100-01-6	99	U	99	250	1
04688	Nitrobenzene	98-95-3	25	U	25	250	1
04688	2-Nitrophenol	88-75-5	25	U	25	250	1
04688	4-Nitrophenol	100-02-7	250	U	250	740	1
04688	N-Nitroso-di-n-propylamine	621-64-7	25	U	25	250	1
04688	N-Nitrosodiphenylamine	86-30-6	25	U	25	250	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	250	U	250	740	1
04688	Phenol	108-95-2	25	U	25	250	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-008-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172043
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD008 SDG#: DE046-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	25	U	25	250	1
04688	2,4,5-Trichlorophenol	95-95-4	50	U	50	250	1
04688	2,4,6-Trichlorophenol	88-06-2	50	U	50	250	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.99	U	0.99	2.5	1
10138	Acenaphthylene	208-96-8	0.50	U	0.50	2.5	1
10138	Anthracene	120-12-7	0.51	J	0.50	2.5	1
10138	Benzo(a)anthracene	56-55-3	1.6	J	0.99	2.5	1
10138	Benzo(a)pyrene	50-32-8	1.4	J	0.99	2.5	1
10138	Benzo(b)fluoranthene	205-99-2	3.4		0.99	2.5	1
10138	Benzo(g,h,i)perylene	191-24-2	2.0	J	0.99	2.5	1
10138	Benzo(k)fluoranthene	207-08-9	1.2	J	0.99	2.5	1
10138	Butylbenzylphthalate	85-68-7	9.9	J	8.9	27	1
10138	Di-n-butylphthalate	84-74-2	8.9	U	8.9	27	1
10138	Chrysene	218-01-9	8.6		0.50	2.5	1
10138	Dibenz(a,h)anthracene	53-70-3	0.99	U	0.99	2.5	1
10138	Diethylphthalate	84-66-2	8.9	U	8.9	27	1
10138	Dimethylphthalate	131-11-3	8.9	U	8.9	27	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	69		8.9	27	1
10138	Fluoranthene	206-44-0	3.2		0.99	2.5	1
10138	Fluorene	86-73-7	0.99	U	0.99	2.5	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.2	J	0.99	2.5	1
10138	1-Methylnaphthalene	90-12-0	2.2	J	0.99	2.5	1
10138	2-Methylnaphthalene	91-57-6	2.1	J	0.99	2.5	1
10138	Naphthalene	91-20-3	4.4		0.99	2.5	1
10138	N-Nitrosodimethylamine	62-75-9	0.99	U	0.99	2.5	1
10138	Di-n-octylphthalate	117-84-0	8.9	U	8.9	27	1
10138	Phenanthrene	85-01-8	4.1		0.99	2.5	1
10138	Pyrene	129-00-0	3.1		0.99	2.5	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.8	U	1.8	5.3	1
10401	Dalapon	75-99-0	6.5	U	6.5	13	1
10401	2,4-DB	94-82-6	3.4	U	3.4	3.4	1
10401	Dicamba	1918-00-9	0.59	U	0.59	1.8	1
10401	Dinoseb	88-85-7	1.2	U	1.2	3.6	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.2	U	1.2	2.5	1
10401	MCPA	94-74-6	240	U	240	370	1
10401	MCPP (Mecoprop)	93-65-2	140	U	140	370	1
10401	2,4,5-T	93-76-5	0.12	U	0.12	0.25	1
10401	2,4,5-TP	93-72-1	0.11	U	0.11	0.25	1

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPP and MCPA.
Due to interfering peaks on the chromatogram, the values reported for 2,4-DB represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result

Sample Description: SED-008-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172043
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD008 SDG#: DE046-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.098	U	0.098	0.25	1
01363	Alpha BHC	319-84-6	0.051	U	0.051	0.25	1
01363	Beta BHC	319-85-7	0.089	U	0.089	0.25	1
01363	Gamma BHC - Lindane	58-89-9	0.051	U	0.051	0.25	1
01363	Chlordane	57-74-9	1.2	U	1.2	5.1	1
01363	p,p-DDD	72-54-8	0.098	U	0.098	0.51	1
01363	p,p-DDE	72-55-9	2.8	U	2.8	2.8	1
01363	p,p-DDT	50-29-3	10		0.49	2.5	5
01363	Delta BHC	319-86-8	0.053	U	0.053	0.25	1
01363	Dieldrin	60-57-1	0.64	U	0.64	0.64	1
01363	Endosulfan I	959-98-8	0.065	U	0.065	0.25	1
01363	Endosulfan II	33213-65-9	0.79	U	0.79	0.79	1
01363	Endosulfan Sulfate	1031-07-8	0.098	U	0.098	0.51	1
01363	Endrin	72-20-8	0.98	U	0.98	0.98	1
01363	Endrin Aldehyde	7421-93-4	0.46	U	0.46	0.51	1
01363	Endrin Ketone	53494-70-5	0.098	U	0.098	0.51	1
01363	Heptachlor	76-44-8	0.089	U	0.089	0.25	1
01363	Heptachlor Epoxide	1024-57-3	0.64	U	0.64	0.64	1
01363	Methoxychlor	72-43-5	0.51	U	0.51	2.5	1
01363	Mirex	2385-85-5	0.098	U	0.098	0.51	1
01363	Toxaphene	8001-35-2	3.3	U	3.3	9.8	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	15	U	15	49	10
10225	Aroclor 5442	12642-23-8	15	U	15	49	10
10225	Aroclor 5460	11126-42-4	15	U	15	49	10
10225	PCB-1016	12674-11-2	4.9	U	4.9	25	10
10225	PCB-1221	11104-28-2	7.4	U	7.4	25	10
10225	PCB-1232	11141-16-5	7.7	U	7.7	25	10
10225	PCB-1242	53469-21-9	7.4	U	7.4	25	10
10225	PCB-1248	12672-29-6	4.9	U	4.9	25	10
10225	PCB-1254	11097-69-1	300		4.9	25	10
10225	PCB-1260	11096-82-5	4.9	U	4.9	25	10
10225	PCB-1262	37324-23-5	4.9	U	4.9	25	10
10225	PCB-1268	11100-14-4	4.9	U	4.9	25	10

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,800		7.12	28.3	1
07914	Boron	7440-42-8	6.76	J	1.26	7.08	1
01650	Calcium	7440-70-2	3,610		8.67	28.3	1
01654	Iron	7439-89-6	19,500		6.67	28.3	1
01656	Lithium	7439-93-2	23.9		0.31	2.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-008-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172043
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD008 SDG#: DE046-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,440		3.59	14.2	1
06958	Manganese	7439-96-5	293		0.110	0.708	1
10145	Phosphorus	7723-14-0	415		0.792	14.2	1
01662	Potassium	7440-09-7	3,590		25.5	70.8	1
01667	Sodium	7440-23-5	82.4	J	52.8	142	1
07968	Strontium	7440-24-6	19.3		0.0877	0.708	1
06969	Tin	7440-31-5	2.87	J	1.42	14.2	1
06970	Titanium	7440-32-6	1,110		0.538	1.42	1
10146	Zirconium	7440-67-7	1.44	J	1.19	7.08	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.109	J	0.0892	0.297	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	12.9		0.0892	0.594	2
06126	Barium	7440-39-3	89.9		0.160	0.594	2
06127	Beryllium	7440-41-7	0.499		0.0238	0.149	2
06128	Cadmium	7440-43-9	0.238		0.0535	0.149	2
06131	Chromium	7440-47-3	16.3		0.178	0.594	2
06132	Cobalt	7440-48-4	5.85		0.0297	0.149	2
06133	Copper	7440-50-8	10.2		0.0981	0.594	2
06135	Lead	7439-92-1	16.9		0.0155	0.297	2
06138	Molybdenum	7439-98-7	0.508		0.0743	0.149	2
06139	Nickel	7440-02-0	12.3		0.149	0.594	2
06141	Selenium	7782-49-2	0.199	J	0.0594	0.594	2
06142	Silver	7440-22-4	0.0811	J	0.0178	0.149	2
06145	Thallium	7440-28-0	0.268		0.0446	0.149	2
06148	Vanadium	7440-62-2	31.2		0.0327	0.149	2
06149	Zinc	7440-66-6	67.9		0.832	4.46	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.106	J	0.0043	0.148	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.7		1.2	1.5	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	29.4	J	13.4	44.6	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.30	U	0.30	1.5	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	505		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-008-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172043
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD008 SDG#: DE046-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.59	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	32.7	0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/19/2011 00:18	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/12/2011 11:11	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/07/2011 01:37	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/15/2011 00:04	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/22/2011 23:15	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 22:23	Lindsey K Lafferty	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-008-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172043
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD008 SDG#: DE046-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:50	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 06:09	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 11:18	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 11:18	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:48	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 11:18	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:15	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 02:34	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 03:52	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 16:35	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-034-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172044
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD034 SDG#: DE046-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U	210	640	1
04688	Benzidine	92-87-5	1,500	U	1,500	4,300	1
04688	Benzoic acid	65-85-0	210	U	210	640	1
04688	Benzyl alcohol	100-51-6	210	U	210	640	1
04688	4-Bromophenyl-phenylether	101-55-3	21	U	21	210	1
04688	Butylbenzylphthalate	85-68-7	32	J	21	210	1
04688	Carbazole	86-74-8	21	U	21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	43	U	43	210	1
04688	4-Chloroaniline	106-47-8	86	U	86	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U	21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U	21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U	21	210	1
04688	2-Chloronaphthalene	91-58-7	21	U	21	210	1
04688	2-Chlorophenol	95-57-8	21	U	21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	43	U	43	210	1
04688	Dibenzofuran	132-64-9	21	U	21	210	1
04688	1,2-Dichlorobenzene	95-50-1	21	U	21	210	1
04688	1,3-Dichlorobenzene	541-73-1	21	U	21	210	1
04688	1,4-Dichlorobenzene	106-46-7	21	U	21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U	130	430	1
04688	2,4-Dichlorophenol	120-83-2	21	U	21	210	1
04688	2,4-Dimethylphenol	105-67-9	43	U	43	210	1
04688	3,5-Dimethylphenol	108-68-9	43	U	43	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U	210	640	1
04688	2,4-Dinitrophenol	51-28-5	860	U	860	2,600	1
04688	2,4-Dinitrotoluene	121-14-2	43	U	43	210	1
04688	2,6-Dinitrotoluene	606-20-2	21	U	21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	21	U	21	210	1
04688	Hexachlorobenzene	118-74-1	21	U	21	210	1
04688	Hexachlorobutadiene	87-68-3	86	U	86	210	1
04688	Hexachlorocyclopentadiene	77-47-4	210	U	210	640	1
04688	Hexachloroethane	67-72-1	21	U	21	210	1
04688	Isophorone	78-59-1	21	U	21	210	1
04688	2-Methylphenol	95-48-7	43	U	43	210	1
04688	4-Methylphenol	106-44-5	43	U	43	210	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	21	U	21	210	1
04688	3-Nitroaniline	99-09-2	43	U	43	210	1
04688	4-Nitroaniline	100-01-6	86	U	86	210	1
04688	Nitrobenzene	98-95-3	21	U	21	210	1
04688	2-Nitrophenol	88-75-5	21	U	21	210	1
04688	4-Nitrophenol	100-02-7	210	U	210	640	1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U	21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	21	U	21	210	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	210	U	210	640	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-034-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172044
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD034 SDG#: DE046-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	21	U	21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	21	U	21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	43	U	43	210	1
04688	2,4,6-Trichlorophenol	88-06-2	43	U	43	210	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.86	U	0.86	2.1	1
10138	Acenaphthylene	208-96-8	0.43	U	0.43	2.1	1
10138	Anthracene	120-12-7	0.43	U	0.43	2.1	1
10138	Benzo(a)anthracene	56-55-3	1.2	J	0.86	2.1	1
10138	Benzo(a)pyrene	50-32-8	2.3		0.86	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	5.0		0.86	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	2.3		0.86	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	2.6		0.86	2.1	1
10138	Di-n-butylphthalate	84-74-2	7.7	U	7.7	23	1
10138	Chrysene	218-01-9	4.5		0.43	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	0.86	U	0.86	2.1	1
10138	Diethylphthalate	84-66-2	7.7	U	7.7	23	1
10138	Dimethylphthalate	131-11-3	7.7	U	7.7	23	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	29		7.7	23	1
10138	Fluoranthene	206-44-0	3.7		0.86	2.1	1
10138	Fluorene	86-73-7	3.4		0.86	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.8	J	0.86	2.1	1
10138	1-Methylnaphthalene	90-12-0	0.86	U	0.86	2.1	1
10138	2-Methylnaphthalene	91-57-6	0.86	U	0.86	2.1	1
10138	Naphthalene	91-20-3	1.1	J	0.86	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	0.86	U	0.86	2.1	1
10138	Di-n-octylphthalate	117-84-0	7.7	U	7.7	23	1
10138	Phenanthrene	85-01-8	2.0	J	0.86	2.1	1
10138	Pyrene	129-00-0	3.5		0.86	2.1	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.5	U	1.5	4.6	1
10401	Dalapon	75-99-0	5.7	U	5.7	12	1
10401	2,4-DB	94-82-6	1.2	U	1.2	2.2	1
10401	Dicamba	1918-00-9	0.51	U	0.51	1.5	1
10401	Dinoseb	88-85-7	1.0	U	1.0	3.1	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0	U	1.0	2.2	1
10401	MCPA	94-74-6	98	U	98	320	1
10401	MCPP (Mecoprop)	93-65-2	96	U	96	320	1
10401	2,4,5-T	93-76-5	0.11	U	0.11	0.22	1
10401	2,4,5-TP	93-72-1	0.096	U	0.096	0.22	1

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SED-034-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172044
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD034 SDG#: DE046-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.085	U	0.085	0.21	1
01363	Alpha BHC	319-84-6	0.044	U	0.044	0.21	1
01363	Beta BHC	319-85-7	0.077	U	0.077	0.21	1
01363	Gamma BHC - Lindane	58-89-9	0.044	U	0.044	0.21	1
01363	Chlordane	57-74-9	1.0	U	1.0	4.4	1
01363	p,p-DDD	72-54-8	0.085	U	0.085	0.44	1
01363	p,p-DDE	72-55-9	0.25	U	0.25	0.44	1
01363	p,p-DDT	50-29-3	0.37	U	0.37	0.44	1
01363	Delta BHC	319-86-8	0.046	U	0.046	0.21	1
01363	Dieldrin	60-57-1	0.085	U	0.085	0.44	1
01363	Endosulfan I	959-98-8	0.057	U	0.057	0.21	1
01363	Endosulfan II	33213-65-9	0.085	U	0.085	0.44	1
01363	Endosulfan Sulfate	1031-07-8	0.29	U	0.29	0.44	1
01363	Endrin	72-20-8	0.085	U	0.085	0.44	1
01363	Endrin Aldehyde	7421-93-4	0.085	U	0.085	0.44	1
01363	Endrin Ketone	53494-70-5	0.085	U	0.085	0.44	1
01363	Heptachlor	76-44-8	0.077	U	0.077	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.044	U	0.044	0.21	1
01363	Methoxychlor	72-43-5	0.44	U	0.44	2.1	1
01363	Mirex	2385-85-5	0.36	U	0.36	0.44	1
01363	Toxaphene	8001-35-2	2.8	U	2.8	8.5	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.3	U	1.3	4.2	1
10225	Aroclor 5442	12642-23-8	1.3	U	1.3	4.2	1
10225	Aroclor 5460	11126-42-4	1.5	J	1.3	4.2	1
10225	PCB-1016	12674-11-2	0.42	U	0.42	2.2	1
10225	PCB-1221	11104-28-2	0.64	U	0.64	2.2	1
10225	PCB-1232	11141-16-5	0.67	U	0.67	2.2	1
10225	PCB-1242	53469-21-9	0.64	U	0.64	2.2	1
10225	PCB-1248	12672-29-6	0.42	U	0.42	2.2	1
10225	PCB-1254	11097-69-1	1.7	J	0.42	2.2	1
10225	PCB-1260	11096-82-5	1.3	J	0.42	2.2	1
10225	PCB-1262	37324-23-5	0.42	U	0.42	2.2	1
10225	PCB-1268	11100-14-4	0.42	U	0.42	2.2	1

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	8,990		6.34	25.2	1
07914	Boron	7440-42-8	5.57	J	1.12	6.30	1
01650	Calcium	7440-70-2	2,330		7.72	25.2	1
01654	Iron	7439-89-6	15,700		5.94	25.2	1
01656	Lithium	7439-93-2	22.6		0.28	2.5	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-034-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172044
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD034 SDG#: DE046-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	3,960		3.20	12.6	1
06958	Manganese	7439-96-5	218		0.0983	0.630	1
10145	Phosphorus	7723-14-0	404		0.706	12.6	1
01662	Potassium	7440-09-7	2,630		22.7	63.0	1
01667	Sodium	7440-23-5	56.6	J	47.0	126	1
07968	Strontium	7440-24-6	8.22		0.0781	0.630	1
06969	Tin	7440-31-5	2.65	J	1.26	12.6	1
06970	Titanium	7440-32-6	826		0.479	1.26	1
10146	Zirconium	7440-67-7	1.06	U	1.06	6.30	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0742	U	0.0742	0.247	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.30		0.0742	0.494	2
06126	Barium	7440-39-3	76.1		0.133	0.494	2
06127	Beryllium	7440-41-7	0.459		0.0198	0.124	2
06128	Cadmium	7440-43-9	0.167		0.0445	0.124	2
06131	Chromium	7440-47-3	13.0		0.148	0.494	2
06132	Cobalt	7440-48-4	4.99		0.0247	0.124	2
06133	Copper	7440-50-8	6.53		0.0816	0.494	2
06135	Lead	7439-92-1	12.7		0.0129	0.247	2
06138	Molybdenum	7439-98-7	0.357		0.0618	0.124	2
06139	Nickel	7440-02-0	9.34		0.124	0.494	2
06141	Selenium	7782-49-2	0.143	J	0.0494	0.494	2
06142	Silver	7440-22-4	0.0249	J	0.0148	0.124	2
06145	Thallium	7440-28-0	0.252		0.0371	0.124	2
06148	Vanadium	7440-62-2	27.7		0.0272	0.124	2
06149	Zinc	7440-66-6	93.8		0.692	3.71	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0035	U	0.0035	0.121	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0		1.0	1.3	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.6	U	11.6	38.6	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.26	U	0.26	1.3	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	513		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						

*=This limit was used in the evaluation of the final result

Sample Description: SED-034-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172044
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD034 SDG#: DE046-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	6.61	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	22.2	0.50	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/19/2011 00:53	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/12/2011 12:15	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/07/2011 02:05	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/15/2011 00:18	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	01/05/2011 17:57	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-034-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172044
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD034 SDG#: DE046-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 14:54	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 06:13	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 11:21	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 11:21	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 11:21	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:18	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 02:53	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 04:15	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11016243202A	01/20/2011 16:48	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-037-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172045
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD037 SDG#: DE046-07*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	230	U	230	700	1
04688	Benzidine	92-87-5	1,600	U	1,600	4,700	1
04688	Benzoic acid	65-85-0	230	U	230	700	1
04688	Benzyl alcohol	100-51-6	230	U	230	700	1
04688	4-Bromophenyl-phenylether	101-55-3	23	U	23	230	1
04688	Carbazole	86-74-8	23	U	23	230	1
04688	4-Chloro-3-methylphenol	59-50-7	47	U	47	230	1
04688	4-Chloroaniline	106-47-8	93	U	93	230	1
04688	bis(2-Chloroethoxy)methane	111-91-1	23	U	23	230	1
04688	bis(2-Chloroethyl)ether	111-44-4	23	U	23	230	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	23	U	23	230	1
04688	2-Chloronaphthalene	91-58-7	23	U	23	230	1
04688	2-Chlorophenol	95-57-8	23	U	23	230	1
04688	4-Chlorophenyl-phenylether	7005-72-3	47	U	47	230	1
04688	Dibenzofuran	132-64-9	23	U	23	230	1
04688	1,2-Dichlorobenzene	95-50-1	23	U	23	230	1
04688	1,3-Dichlorobenzene	541-73-1	23	U	23	230	1
04688	1,4-Dichlorobenzene	106-46-7	23	U	23	230	1
04688	3,3'-Dichlorobenzidine	91-94-1	140	U	140	470	1
04688	2,4-Dichlorophenol	120-83-2	23	U	23	230	1
04688	2,4-Dimethylphenol	105-67-9	47	U	47	230	1
04688	3,5-Dimethylphenol	108-68-9	47	U	47	230	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	230	U	230	700	1
04688	2,4-Dinitrophenol	51-28-5	930	U	930	2,800	1
04688	2,4-Dinitrotoluene	121-14-2	47	U	47	230	1
04688	2,6-Dinitrotoluene	606-20-2	23	U	23	230	1
04688	1,2-Diphenylhydrazine	122-66-7	23	U	23	230	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	35	J	23	470	1
04688	Hexachlorobenzene	118-74-1	23	U	23	230	1
04688	Hexachlorobutadiene	87-68-3	93	U	93	230	1
04688	Hexachlorocyclopentadiene	77-47-4	230	U	230	700	1
04688	Hexachloroethane	67-72-1	23	U	23	230	1
04688	Isophorone	78-59-1	23	U	23	230	1
04688	2-Methylphenol	95-48-7	47	U	47	230	1
04688	4-Methylphenol	106-44-5	47	U	47	230	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	23	U	23	230	1
04688	3-Nitroaniline	99-09-2	47	U	47	230	1
04688	4-Nitroaniline	100-01-6	93	U	93	230	1
04688	Nitrobenzene	98-95-3	23	U	23	230	1
04688	2-Nitrophenol	88-75-5	23	U	23	230	1
04688	4-Nitrophenol	100-02-7	230	U	230	700	1
04688	N-Nitroso-di-n-propylamine	621-64-7	23	U	23	230	1
04688	N-Nitrosodiphenylamine	86-30-6	23	U	23	230	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	230	U	230	700	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-037-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172045
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD037 SDG#: DE046-07*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	23	U	23	230	1
04688	1,2,4-Trichlorobenzene	120-82-1	23	U	23	230	1
04688	2,4,5-Trichlorophenol	95-95-4	47	U	47	230	1
04688	2,4,6-Trichlorophenol	88-06-2	47	U	47	230	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.93	U	0.93	2.3	1
10138	Acenaphthylene	208-96-8	0.71	J	0.47	2.3	1
10138	Anthracene	120-12-7	1.1	J	0.47	2.3	1
10138	Benzo(a)anthracene	56-55-3	4.9		0.93	2.3	1
10138	Benzo(a)pyrene	50-32-8	6.0		0.93	2.3	1
10138	Benzo(b)fluoranthene	205-99-2	13		0.93	2.3	1
10138	Benzo(g,h,i)perylene	191-24-2	4.5		0.93	2.3	1
10138	Benzo(k)fluoranthene	207-08-9	4.8		0.93	2.3	1
10138	Butylbenzylphthalate	85-68-7	8.4	U	8.4	25	1
10138	Di-n-butylphthalate	84-74-2	8.4	U	8.4	25	1
10138	Chrysene	218-01-9	10		0.47	2.3	1
10138	Dibenz(a,h)anthracene	53-70-3	0.93	U	0.93	2.3	1
10138	Diethylphthalate	84-66-2	8.4	U	8.4	25	1
10138	Dimethylphthalate	131-11-3	8.4	U	8.4	25	1
10138	Fluoranthene	206-44-0	8.3		0.93	2.3	1
10138	Fluorene	86-73-7	3.5		0.93	2.3	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.4		0.93	2.3	1
10138	1-Methylnaphthalene	90-12-0	2.6		0.93	2.3	1
10138	2-Methylnaphthalene	91-57-6	3.1		0.93	2.3	1
10138	Naphthalene	91-20-3	5.9		0.93	2.3	1
10138	N-Nitrosodimethylamine	62-75-9	0.93	U	0.93	2.3	1
10138	Di-n-octylphthalate	117-84-0	8.4	U	8.4	25	1
10138	Phenanthrene	85-01-8	6.0		0.93	2.3	1
10138	Pyrene	129-00-0	7.8		0.93	2.3	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.7	U	1.7	5.0	1
10401	Dalapon	75-99-0	6.1	U	6.1	13	1
10401	2,4-DB	94-82-6	1.4	U	1.4	2.4	1
10401	Dicamba	1918-00-9	0.56	U	0.56	1.7	1
10401	Dinoseb	88-85-7	1.1	U	1.1	3.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.1	U	1.1	2.4	1
10401	MCPA	94-74-6	110	U	110	350	1
10401	MCPP (Mecoprop)	93-65-2	390		100	350	1
10401	2,4,5-T	93-76-5	0.11	U	0.11	0.24	1
10401	2,4,5-TP	93-72-1	0.10	U	0.10	0.24	1

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: 2,4-DB.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SED-037-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172045
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD037 SDG#: DE046-07*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.15	U	0.15	0.23	1
01363	Alpha BHC	319-84-6	0.047	U	0.047	0.23	1
01363	Beta BHC	319-85-7	0.084	U	0.084	0.23	1
01363	Gamma BHC - Lindane	58-89-9	0.047	U	0.047	0.23	1
01363	Chlordane	57-74-9	9.6	U	9.6	9.6	1
01363	p,p-DDD	72-54-8	0.092	U	0.092	0.47	1
01363	p,p-DDE	72-55-9	2.7		0.46	2.4	5
01363	p,p-DDT	50-29-3	3.7		0.46	2.4	5
01363	Delta BHC	319-86-8	0.050	U	0.050	0.23	1
01363	Dieldrin	60-57-1	0.49	U	0.49	0.49	1
01363	Endosulfan I	959-98-8	0.061	U	0.061	0.23	1
01363	Endosulfan II	33213-65-9	0.11	U	0.11	0.47	1
01363	Endosulfan Sulfate	1031-07-8	0.092	U	0.092	0.47	1
01363	Endrin	72-20-8	0.36	U	0.36	0.47	1
01363	Endrin Aldehyde	7421-93-4	1.2	U	1.2	1.2	1
01363	Endrin Ketone	53494-70-5	0.092	U	0.092	0.47	1
01363	Heptachlor	76-44-8	0.16	U	0.16	0.23	1
01363	Heptachlor Epoxide	1024-57-3	0.29	U	0.29	0.29	1
01363	Methoxychlor	72-43-5	0.47	U	0.47	2.3	1
01363	Mirex	2385-85-5	0.25	U	0.25	0.47	1
01363	Toxaphene	8001-35-2	3.1	U	3.1	9.2	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	2.8	U	2.8	9.2	2
10225	Aroclor 5442	12642-23-8	2.8	U	2.8	9.2	2
10225	Aroclor 5460	11126-42-4	140		2.8	9.2	2
10225	PCB-1016	12674-11-2	0.92	U	0.92	4.7	2
10225	PCB-1221	11104-28-2	1.4	U	1.4	4.7	2
10225	PCB-1232	11141-16-5	1.5	U	1.5	4.7	2
10225	PCB-1242	53469-21-9	1.4	U	1.4	4.7	2
10225	PCB-1248	12672-29-6	0.92	U	0.92	4.7	2
10225	PCB-1254	11097-69-1	88		0.92	4.7	2
10225	PCB-1260	11096-82-5	0.92	U	0.92	4.7	2
10225	PCB-1262	37324-23-5	0.92	U	0.92	4.7	2
10225	PCB-1268	11100-14-4	0.92	U	0.92	4.7	2

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,100		6.89	27.4	1
07914	Boron	7440-42-8	8.62		1.22	6.85	1
01650	Calcium	7440-70-2	4,920		8.39	27.4	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-037-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172045
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD037 SDG#: DE046-07*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01654	Iron	7439-89-6	18,600		6.45	27.4	1
01656	Lithium	7439-93-2	20.8		0.30	2.7	1
01657	Magnesium	7439-95-4	4,530		3.48	13.7	1
06958	Manganese	7439-96-5	306		0.107	0.685	1
10145	Phosphorus	7723-14-0	449		0.767	13.7	1
01662	Potassium	7440-09-7	3,310		24.6	68.5	1
01667	Sodium	7440-23-5	121	J	51.1	137	1
07968	Strontium	7440-24-6	27.0		0.0849	0.685	1
06969	Tin	7440-31-5	3.42	J	1.37	13.7	1
06970	Titanium	7440-32-6	1,030		0.520	1.37	1
10146	Zirconium	7440-67-7	1.54	J	1.15	6.85	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.249	J	0.0798	0.266	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.93		0.0798	0.532	2
06126	Barium	7440-39-3	124		0.144	0.532	2
06127	Beryllium	7440-41-7	0.677		0.0213	0.133	2
06128	Cadmium	7440-43-9	0.397		0.0479	0.133	2
06131	Chromium	7440-47-3	23.8		0.160	0.532	2
06132	Cobalt	7440-48-4	7.03		0.0266	0.133	2
06133	Copper	7440-50-8	12.8		0.0878	0.532	2
06135	Lead	7439-92-1	49.0		0.0138	0.266	2
06138	Molybdenum	7439-98-7	0.676		0.0665	0.133	2
06139	Nickel	7440-02-0	18.6		0.133	0.532	2
06141	Selenium	7782-49-2	0.266	J	0.0532	0.532	2
06142	Silver	7440-22-4	0.127	J	0.0160	0.133	2
06145	Thallium	7440-28-0	0.321		0.0399	0.133	2
06148	Vanadium	7440-62-2	46.2		0.0293	0.133	2
06149	Zinc	7440-66-6	238		0.745	3.99	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0210	J	0.0038	0.131	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.4		1.1	1.4	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	12.6	U	12.6	41.9	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.63	J	0.28	1.4	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	583		10.0	10.0	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-037-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172045
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD037 SDG#: DE046-07*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.30	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	28.4	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10362SLF026	01/19/2011 01:29	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362SLK026	01/12/2011 12:47	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10362SLK026	12/29/2010 06:15	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10362SLF026	12/29/2010 08:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	103650019A	01/07/2011 02:33	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/15/2011 00:46	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103630018A	01/25/2011 03:09	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103560035A	12/31/2010 23:00	Lindsey K Lafferty	2
11134	Pesticide Screen Soils Ext	SW-846 3550B	2	103630018A	12/30/2010 07:50	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103560035A	12/23/2010 06:00	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	103650019A	01/03/2011 23:45	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
07914	Boron	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
01650	Calcium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
01654	Iron	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
01656	Lithium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
01657	Magnesium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-037-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172045
LLI Group # 1226677
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

Submitted: 12/22/2010 10:55
Reported: 02/01/2011 10:44

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD037 SDG#: DE046-07*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
10145	Phosphorus	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
01662	Potassium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
01667	Sodium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
07968	Strontium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
06969	Tin	SW-846 6010B	1	103625708002	12/30/2010 15:04	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
10146	Zirconium	SW-846 6010B	1	103625708002	12/30/2010 06:17	John W Yanzuk II	1
06124	Antimony	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103621026001D	01/05/2011 11:24	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103621026001C	01/05/2011 11:24	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103621026001B	01/06/2011 15:51	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103621026001A	01/05/2011 11:24	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103625711002	12/28/2010 20:20	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103625708002	12/28/2010 12:34	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103621026001	12/28/2010 12:34	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103625711002	12/28/2010 14:42	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11010010206A	01/14/2011 03:11	Nicole M Kepley	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11010010204A	01/12/2011 04:38	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11016243202A	01/20/2011 17:06	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11010010206A	01/10/2011 21:35	Joseph E McKenzie	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11010010204A	01/10/2011 13:40	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182101A	12/27/2010 08:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039401A	12/27/2010 08:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11016243202A	01/16/2011 07:55	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226677
Reported: 02/01/11 at 10:44 AM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10362SLF026	Sample number(s): 6172036-6172040,6172042-6172045									
Acenaphthene	17	U	17.	170	ug/kg	92		76-111		
Acenaphthylene	17	U	17.	170	ug/kg	95		75-122		
Aniline	170 U		170.	500	ug/kg	37		10-107		
Anthracene	17	U	17.	170	ug/kg	94		76-112		
Benzidine	1,200 U		1,200.	3,300	ug/kg	34		15-121		
Benzo(a)anthracene	17	U	17.	170	ug/kg	92		73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	82		69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	80		61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	77		65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	80		67-125		
Benzoic acid	170 U		170.	500	ug/kg	92		10-154		
Benzyl alcohol	170 U		170.	500	ug/kg	86		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	90		79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	94		75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	90		79-112		
Carbazole	17	U	17.	170	ug/kg	94		77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	92		74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	37		10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	95		70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	86		70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	86		68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	77		67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	91		72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	93		79-110		
Chrysene	17	U	17.	170	ug/kg	90		76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	79		70-128		
Dibenzofuran	17	U	17.	170	ug/kg	92		79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	89		79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	86		70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	87		74-106		
3,3'-Dichlorobenzidine	100 U		100.	330	ug/kg	39		38-105		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	94		75-111		
Diethylphthalate	17	U	17.	170	ug/kg	91		76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	95		72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	105		70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	91		77-109		
4,6-Dinitro-2-methylphenol	170 U		170.	500	ug/kg	80		53-110		
2,4-Dinitrophenol	670 U		670.	2,000	ug/kg	77		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	95		73-115		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226677
Reported: 02/01/11 at 10:44 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	97		79-115		
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	99		77-111		
bis(2-Ethylhexyl)phthalate	17	U	17.	330	ug/kg	92		75-117		
Fluoranthene	17	U	17.	170	ug/kg	94		78-116		
Fluorene	17	U	17.	170	ug/kg	93		75-116		
Hexachlorobenzene	17	U	17.	170	ug/kg	93		78-116		
Hexachlorobutadiene	67	U	67.	170	ug/kg	97		70-112		
Hexachlorocyclopentadiene	170	U	170.	500	ug/kg	106		46-115		
Hexachloroethane	17	U	17.	170	ug/kg	91		68-105		
Indeno(1,2,3-cd)pyrene	17	U	17.	170	ug/kg	79		64-119		
Isophorone	17	U	17.	170	ug/kg	92		69-110		
1-Methylnaphthalene	17	U	17.	170	ug/kg	91		74-105		
2-Methylnaphthalene	17	U	17.	170	ug/kg	86		76-105		
2-Methylphenol	33	U	33.	170	ug/kg	87		66-110		
4-Methylphenol	33	U	33.	170	ug/kg	88		66-117		
Naphthalene	17	U	17.	170	ug/kg	89		73-106		
2-Nitroaniline	17	U	17.	170	ug/kg	100		78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	82		62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	61		49-98		
Nitrobenzene	17	U	17.	170	ug/kg	96		71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	94		81-114		
4-Nitrophenol	170	U	170.	500	ug/kg	96		56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	86		63-107		
N-Nitrosodimethylamine	33	U	33.	170	ug/kg	76		60-106		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	94		67-141		
Di-n-octylphthalate	17	U	17.	170	ug/kg	81		68-130		
Pentachlorophenol	170	U	170.	500	ug/kg	80		35-106		
Phenanthrene	17	U	17.	170	ug/kg	91		77-113		
Phenol	17	U	17.	170	ug/kg	90		58-112		
Pyrene	17	U	17.	170	ug/kg	92		75-115		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	94		73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	97		76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	101		78-111		
Batch number: 10362SLK026	Sample number(s): 6172036-6172040,6172042-6172045									
Acenaphthene	0.67	U	0.67	1.7	ug/kg	93		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	95		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	101		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	100		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	95		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	98		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	99		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	101		66-137		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	111		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	112		84-132		
Chrysene	0.33	U	0.33	1.7	ug/kg	93		79-120		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	99		62-142		
Diethylphthalate	6.0	U	6.0	18	ug/kg	102		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	103		70-130		
Bis(2-Ethylhexyl)phthalate	6.0	U	6.0	18	ug/kg	110		67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	99		78-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	98		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	100		62-141		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	92		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	83		62-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226677
Reported: 02/01/11 at 10:44 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Naphthalene	0.67	U	0.67	1.7	ug/kg	91		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	94		39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	112		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	93		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	96		56-121		
Batch number: 103650019A	Sample number(s): 6172036-6172040,6172042-6172045									
2,4-D	1.2	U	1.2	3.6	ug/kg	105		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	91*		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	88		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	87		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	12		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	107		60-141		
MCPA	76	U	76.	250	ug/kg	96		34-113		
MCPP (Mecoprop)	75	U	75.	250	ug/kg	97		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	95		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	93		48-138		
Batch number: 103560035A	Sample number(s): 6172036-6172040,6172042-6172045									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	69*	53*	75-125	26	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	81		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	124		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 103630018A	Sample number(s): 6172036-6172040,6172042-6172045									
Aldrin	0.066	U	0.066	0.17	ug/kg	124		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	82		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	113		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	88		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	85		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	123		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	85		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	103		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	91		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	85		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	115		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	123		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	92		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	95		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	111		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	91		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	136*		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	95		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					
Batch number: 103621026001A	Sample number(s): 6172036-6172045									
Antimony	0.0594	U	0.0594	0.198	mg/kg	61		11-208		
Arsenic	0.0594	U	0.0594	0.396	mg/kg	99		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226677
Reported: 02/01/11 at 10:44 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Beryllium	0.0158	U	0.0158	0.0990	mg/kg	104		82-118		
Cadmium	0.0356	U	0.0356	0.0990	mg/kg	99		82-118		
Chromium	0.119	U	0.119	0.396	mg/kg	105		80-120		
Cobalt	0.0198	U	0.0198	0.0990	mg/kg	106		82-118		
Copper	0.0909	J	0.0653	0.396	mg/kg	108		80-120		
Lead	0.0103	U	0.0103	0.198	mg/kg	105		80-120		
Nickel	0.0990	U	0.0990	0.396	mg/kg	106		80-120		
Silver	0.0119	U	0.0119	0.0990	mg/kg	103		66-134		
Thallium	0.0297	U	0.0297	0.0990	mg/kg	104		81-119		
Vanadium	0.0218	U	0.0218	0.0990	mg/kg	93		90-110		
Zinc	0.554	U	0.554	2.97	mg/kg	98		78-122		
Batch number: 103621026001B	Sample number(s): 6172036-6172045									
Selenium	0.0396	U	0.0396	0.396	mg/kg	96		79-122		
Batch number: 103621026001C	Sample number(s): 6172036-6172045									
Molybdenum	0.0495	U	0.0495	0.0990	mg/kg	103		78-122		
Batch number: 103621026001D	Sample number(s): 6172036-6172045									
Barium	0.107	U	0.107	0.396	mg/kg	105		79-121		
Batch number: 103625708002	Sample number(s): 6172036-6172045									
Aluminum	4.93	U	4.93	19.6	mg/kg	97		61-110		
Boron	0.873	U	0.873	4.90	mg/kg	91		78-110		
Calcium	6.01	U	6.01	19.6	mg/kg	101		88-110		
Iron	4.62	U	4.62	19.6	mg/kg	85		61-110		
Lithium	0.22	U	0.22	2.0	mg/kg	99		80-120		
Magnesium	2.49	U	2.49	9.80	mg/kg	97		82-110		
Manganese	0.0765	U	0.0765	0.490	mg/kg	97		81-119		
Phosphorus	1.73	J	0.549	9.80	mg/kg	100		80-120		
Potassium	17.6	U	17.6	49.0	mg/kg	100		78-110		
Sodium	36.6	U	36.6	98.0	mg/kg	95		87-110		
Strontium	0.0608	U	0.0608	0.490	mg/kg	102		79-121		
Tin	1.33	J	0.980	9.80	mg/kg	103		90-114		
Titanium	0.373	U	0.373	0.980	mg/kg	84		80-120		
Zirconium	0.824	U	0.824	4.90	mg/kg	100		80-120		
Batch number: 103625711002	Sample number(s): 6172036-6172045									
Mercury	0.0027	U	0.0027	0.0956	mg/kg	99		88-123		
Batch number: 11010010204A	Sample number(s): 6172036-6172039,6172041-6172045									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	103		85-115		
Batch number: 11010010206A	Sample number(s): 6172036-6172039,6172041-6172045									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	96		90-110		
Batch number: 11016243202A	Sample number(s): 6172036-6172039,6172041-6172045									
3a Cr VI by EPA 7199	0.20	U	0.20	1.0	mg/kg	99		80-120		
Batch number: 10361039401A	Sample number(s): 6172036-6172038,6172041-6172045									
22a pH by 9045C						100		95-105		
Batch number: 10361182101A	Sample number(s): 6172036-6172038,6172041-6172045									
Oxidation Reduction Potential						100		98-102		
Batch number: 11006162401A	Sample number(s): 6172036-6172045									
28a Moisture Content by 160.3						100		80-120		
28a Moisture Content by 160.3						100		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226677
Reported: 02/01/11 at 10:44 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
28a Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10362SLF026	Sample number(s): 6172036-6172040,6172042-6172045 UNSPK: 6172038								
Acenaphthene	90	96	75-115	6	30				
Acenaphthylene	94	100	49-126	7	30				
Aniline	59	68	14-114	15	30				
Anthracene	91	95	75-115	4	30				
Benzidine	35	19*	35-141	57*	30				
Benzo(a)anthracene	93	94	65-122	1	30				
Benzo(a)pyrene	82	83	57-126	1	30				
Benzo(b)fluoranthene	86	86	59-125	0	30				
Benzo(g,h,i)perylene	75	75	59-127	1	30				
Benzo(k)fluoranthene	85	88	56-132	3	30				
Benzoic acid	93	95	10-173	2	30				
Benzyl alcohol	86	89	55-123	4	30				
4-Bromophenyl-phenylether	90	92	67-129	3	30				
Butylbenzylphthalate	102	104	73-134	2	30				
Di-n-butylphthalate	92	94	67-123	2	30				
Carbazole	92	95	64-120	3	30				
4-Chloro-3-methylphenol	90	91	53-130	1	30				
4-Chloroaniline	74	80	23-95	9	30				
bis(2-Chloroethoxy)methane	93	96	54-117	3	30				
bis(2-Chloroethyl)ether	84	84	60-116	0	30				
bis(2-Chloroisopropyl)ether	86	87	55-142	1	30				
2-Chloronaphthalene	78	89	50-141	12	30				
2-Chlorophenol	90	94	73-121	5	30				
4-Chlorophenyl-phenylether	89	96	64-119	7	30				
Chrysene	93	94	62-128	1	30				
Dibenz(a,h)anthracene	80	79	65-125	1	30				
Dibenzofuran	89	95	71-112	7	30				
1,2-Dichlorobenzene	87	89	66-108	2	30				
1,3-Dichlorobenzene	85	87	63-109	3	30				
1,4-Dichlorobenzene	86	88	53-113	3	30				
3,3'-Dichlorobenzidine	77	84	25-123	10	30				
2,4-Dichlorophenol	90	96	78-117	6	30				
Diethylphthalate	90	95	66-118	6	30				
2,4-Dimethylphenol	91	94	56-130	4	30				
3,5-Dimethylphenol	101	104	70-130	3	30				
Dimethylphthalate	90	95	64-118	5	30				
4,6-Dinitro-2-methylphenol	78	76	10-148	3	30				
2,4-Dinitrophenol	68	66	20-143	3	30				
2,4-Dinitrotoluene	93	98	57-114	6	30				
2,6-Dinitrotoluene	91	97	69-123	6	30				
1,2-Diphenylhydrazine	99	101	71-129	2	30				
bis(2-Ethylhexyl)phthalate	101	98	63-122	2	30				
Fluoranthene	92	95	59-122	3	30				
Fluorene	88	95	60-125	7	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226677
Reported: 02/01/11 at 10:44 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Hexachlorobenzene	94	96	61-111	2	30				
Hexachlorobutadiene	98	101	62-120	4	30				
Hexachlorocyclopentadiene	79	85	10-153	7	30				
Hexachloroethane	91	94	57-109	4	30				
Indeno(1,2,3-cd)pyrene	78	78	61-126	1	30				
Isophorone	87	92	51-118	5	30				
1-Methylnaphthalene	88	92	73-112	4	30				
2-Methylnaphthalene	83	86	76-114	3	30				
2-Methylphenol	87	90	47-142	4	30				
4-Methylphenol	84	89	55-126	5	30				
Naphthalene	85	90	72-116	6	30				
2-Nitroaniline	102	109	67-125	7	30				
3-Nitroaniline	91	96	59-122	6	30				
4-Nitroaniline	75	91	52-112	20	30				
Nitrobenzene	97	97	51-114	0	30				
2-Nitrophenol	93	94	74-115	1	30				
4-Nitrophenol	99	106	39-133	7	30				
N-Nitroso-di-n-propylamine	86	90	60-116	4	30				
N-Nitrosodimethylamine	73	78	47-116	6	30				
N-Nitrosodiphenylamine	93	97	86-145	4	30				
Di-n-octylphthalate	96	95	56-126	1	30				
Pentachlorophenol	79	80	17-149	1	30				
Phenanthrene	89	92	65-125	3	30				
Phenol	86	93	58-126	8	30				
Pyrene	102	100	51-151	2	30				
1,2,4-Trichlorobenzene	89	96	72-115	7	30				
2,4,5-Trichlorophenol	97	102	34-139	5	30				
2,4,6-Trichlorophenol	100	107	49-140	7	30				
Batch number: 10362SLK026	Sample number(s): 6172036-6172040,6172042-6172045 UNSPK: 6172038								
Acenaphthene	97	96	63-105	1	30				
Acenaphthylene	93	98	55-126	5	30				
Anthracene	98	94	46-136	4	30				
Benzo(a)anthracene	101	108	39-144	6	30				
Benzo(a)pyrene	95	98	34-156	3	30				
Benzo(b)fluoranthene	106	107	43-155	1	30				
Benzo(g,h,i)perylene	70	63	33-141	9	30				
Benzo(k)fluoranthene	98	106	42-144	8	30				
Butylbenzylphthalate	120	128	73-140	7	30				
Di-n-butylphthalate	111	111	78-160	0	30				
Chrysene	89	93	29-156	4	30				
Dibenz(a,h)anthracene	84	78	41-130	6	30				
Diethylphthalate	102	112	87-131	9	30				
Dimethylphthalate	102	112	74-118	9	30				
Bis(2-Ethylhexyl)phthalate	82	109	39-167	19	30				
Fluoranthene	97	100	26-166	3	30				
Fluorene	98	105	45-121	7	30				
Indeno(1,2,3-cd)pyrene	82	74	21-143	10	30				
1-Methylnaphthalene	94	93	72-123	1	30				
2-Methylnaphthalene	87	86	28-121	1	30				
Naphthalene	94	99	61-102	5	30				
N-Nitrosodimethylamine	101	23*	48-113	126*	30				
Di-n-octylphthalate	88	95	40-192	6	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226677
Reported: 02/01/11 at 10:44 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Phenanthrene	93	96	12-165	3	30				
Pyrene	87	92	15-153	5	30				
Batch number: 103650019A	Sample number(s): 6172036-6172040,6172042-6172045 UNSPK: 6172038								
2,4-D	112	118	28-161	5	35				
Dalapon	90*	93*	12-86	3	50				
2,4-DB	108	117	20-170	9	50				
Dicamba	82	67	33-120	19	50				
Dinoseb	12	16	1-44	29	35				
2,4-DP (Dichlorprop)	101	98	55-141	3	50				
MCPA	149	158	31-184	6	50				
MCPP (Mecoprop)	87	92	16-174	6	50				
2,4,5-T	57	59	25-132	4	35				
2,4,5-TP	82	84	10-183	3	35				
Batch number: 103560035A	Sample number(s): 6172036-6172040,6172042-6172045 UNSPK: 6172038								
PCB-1016	104	114	29-146	9	50				
PCB-1260	148	136	39-149	7	50				
Batch number: 103630018A	Sample number(s): 6172036-6172040,6172042-6172045 UNSPK: 6172038								
Aldrin	76	100	16-126	28	50				
Alpha BHC	52	76	10-129	38	50				
Beta BHC	72	59	14-147	19	50				
Gamma BHC - Lindane	58	85	10-140	38	50				
p,p-DDD	82	145	16-163	55*	50				
p,p-DDE	188*	240*	18-161	24	50				
p,p-DDT	129	186*	10-176	36	50				
Delta BHC	69	106	23-140	43	50				
Dieldrin	65	98	19-154	41	50				
Endosulfan I	55	79	16-137	36	50				
Endosulfan II	69	117	28-154	51*	50				
Endosulfan Sulfate	86	122	21-160	34	50				
Endrin	65	102	11-149	44	50				
Endrin Aldehyde	59	114	10-148	63*	35				
Endrin Ketone	64	95	22-165	40	50				
Heptachlor	58	88	13-126	42	50				
Heptachlor Epoxide	82	127	13-157	43	50				
Methoxychlor	59	92	32-147	44	50				
Batch number: 103621026001A	Sample number(s): 6172036-6172045 UNSPK: 6172038 BKG: 6172038								
Antimony	40*	45*	75-125	10	20	0.134 J	0.0583 U	200* (1)	20
Arsenic	103	135*	75-125	9	20	4.56	2.95	43*	20
Beryllium	120	115	75-125	3	20	0.525	0.404	26* (1)	20
Cadmium	129*	126*	75-125	2	20	0.181	0.151	18 (1)	20
Chromium	98	95	75-125	1	20	20.5	13.0	45*	20
Cobalt	121	120	75-125	0	20	5.64	3.94	36*	20
Copper	118	109	75-125	4	20	8.92	6.31	34*	20
Lead	141 (2)	47 (2)	75-125	17	20	13.4	10.3	26*	20
Nickel	130*	141*	75-125	4	20	14.2	8.94	46*	20
Silver	125	124	75-125	1	20	0.0395 J	0.0379 J	4 (1)	20
Thallium	129*	121	75-125	4	20	0.290	0.189	42* (1)	20
Vanadium	109	132*	75-125	5	20	35.3	24.7	36*	20
Zinc	101 (2)	144 (2)	75-125	5	20	66.7	45.7	37*	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226677
Reported: 02/01/11 at 10:44 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 103621026001B	Sample number(s): 6172036-6172045 UNSPK: 6172038 BKG: 6172038								
Selenium	90	88	75-125	1	20	0.161 J	0.146 J	10 (1)	20
Batch number: 103621026001C	Sample number(s): 6172036-6172045 UNSPK: 6172038 BKG: 6172038								
Molybdenum	133*	135*	75-125	2	20	0.663	0.433	42* (1)	20
Batch number: 103621026001D	Sample number(s): 6172036-6172045 UNSPK: 6172038 BKG: 6172038								
Barium	102 (2)	227 (2)	75-125	11	20	91.1	61.8	38*	20
Batch number: 103625708002	Sample number(s): 6172036-6172045 UNSPK: 6172038 BKG: 6172038								
Aluminum	1494 (2)	1284 (2)	75-125	3	20	12,300	12,200	0	20
Boron	93	95	84-115	1	20	3.33 J	3.89 J	16 (1)	20
Calcium	169 (2)	147 (2)	75-125	3	20	2,070	2,170	5	20
Iron	543 (2)	-55 (2)	75-125	4	20	15,600	15,400	1	20
Lithium	97	98	82-114	1	20	18.3	18.3	0	20
Magnesium	181 (2)	136 (2)	75-125	2	20	3,580	3,620	1	20
Manganese	107 (2)	96 (2)	75-125	2	20	232	229	1	20
Phosphorus	103	83	75-125	4	20	365	380	4	20
Potassium	101	96	75-125	1	20	2,720	2,570	6	20
Sodium	97	99	75-125	2	20	61.2 J	62.1 J	2 (1)	20
Strontium	97	99	75-115	2	20	12.8	13.3	4	20
Tin	91	91	80-110	1	20	1.88 J	1.78 J	5 (1)	20
Titanium	228 (2)	200 (2)	75-125	2	20	921	892	3	20
Zirconium	90	91	75-125	2	20	0.816 U	1.26 J	200* (1)	20
Batch number: 103625711002	Sample number(s): 6172036-6172045 UNSPK: 6172038 BKG: 6172038								
Mercury	101	101	65-135	0	20	0.0250 J	0.0294 J	16 (1)	20
Batch number: 11010010204A	Sample number(s): 6172036-6172039,6172041-6172045 UNSPK: 6172038 BKG: 6172038								
7a Perchlorate EPA 314.0	101		80-120			9.0 U	28.9 J	200* (1)	15
Batch number: 11010010206A	Sample number(s): 6172036-6172039,6172041-6172045 UNSPK: 6172038 BKG: 6172038								
11a Anions by 300.0 - Fluoride	62*		80-120			2.1	1.2	55* (1)	20
Batch number: 11016243202A	Sample number(s): 6172036-6172039,6172041-6172045 UNSPK: 6172038 BKG: 6172038								
3a Cr VI by EPA 7199	84		75-125			0.49 J	0.61 J	22* (1)	20
Batch number: 10361039401A	Sample number(s): 6172036-6172038,6172041-6172045 BKG: 6172038								
22a pH by 9045C						6.64	6.50	2*	1
Batch number: 10361182101A	Sample number(s): 6172036-6172038,6172041-6172045 BKG: 6172038								
Oxidation Reduction Potential						434	430	1	6
Batch number: 11006162401A	Sample number(s): 6172036-6172045 BKG: 6172038								
28a Moisture Content by 160.3						19.1	20.3	6	20
28a Moisture Content by 160.3						19.1	20.3	6	20
28a Moisture Content by 160.3						19.1	20.3	6	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226677
Reported: 02/01/11 at 10:44 AM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 10362SLF026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6172036	81	82	81	73	82	82
6172037	92	90	100	80	92	97
6172038	84	84	95	84	93	91
6172039	83	82	99	87	87	90
6172040	90	90	107	92	95	88
6172042	79	79	80	73	85	85
6172043	88	85	96	80	92	101
6172044	90	87	94	81	92	99
6172045	87	86	93	81	90	96
Blank	81	81	90	78	87	79
LCS	87	87	100	90	91	83
MS	83	82	99	87	87	90
MSD	90	90	107	92	95	88
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10362SLK026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6172036	99	91	89
6172037	95	88	103
6172038	97	86	92
6172039	102	85	92
6172040	99	91	96
6172042	95	87	119
6172043	96	84	84
6172044	90	86	82
6172045	100	90	80
Blank	92	82	94
LCS	95	83	97
MS	102	85	92
MSD	99	91	96
Limits:	40-130	45-130	45-135

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 103560035A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6172036	98	108
6172037	99	122*
6172038	108	134*
6172039	110	145*
6172040	102	133*
6172042	86	103
6172043	120	117
6172044	125	157*
6172045	104	118
Blank	105	114

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226677
Reported: 02/01/11 at 10:44 AM

Surrogate Quality Control

LCS	96	112
LCSD	91	104
MS	110	145*
MSD	102	133*
Limits:	53-139	45-120

Analysis Name: 12a Pesticides by 8081A
Batch number: 103630018A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6172036	75	82
6172037	97	270*
6172038	43*	49
6172039	50	65
6172040	80	103
6172042	58	82
6172043	15*	0*
6172044	20*	8*
6172045	71	348*
Blank	66	82
LCS	88	109
MS	50	65
MSD	80	103
Limits:	50-130	20-120

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 103650019A

	2,4-Dichlorophenylacetic acid
6172036	82
6172037	98
6172038	82
6172039	91
6172040	91
6172042	81
6172043	86
6172044	89
6172045	98
Blank	84
LCS	99
MS	91
MSD	91
Limits:	36-156

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

13013 1226677 6172036-45

CHAIN OF CUSTODY RECORD

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-EFH EPA 8015B Mod.	*Metals EPA 6010/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
DUP01-SIV-QC-122010	12.20.10	0832	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										SEDIMENT DUP
DUP09-SA5B-QC-122010	12.20.10	1011	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										SURFACE DUP
DUP14-SA5B-QC-122010	12.20.10	1439	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	SUBSURFACE DUP
DUP14-SA5B-QC-122010	12.20.10	1439	soil	none	5 Encore Samplers	X	X		X																				SUBSURFACE DUP
EB06-SA5B-122010	12.20.10	1235	water	none	6-1 liter ambers			X						X	X			X	X										surface tool rinsate
EB06-SA5B-122010	12.20.10	1235	water	none	1-500 ml poly							X	X			X													surface tool rinsate
EB06-SA5B-122010	12.20.10	1235	water	HNO3	1-500 ml poly						X																		surface tool rinsate
SED-003-SIV-SD-0.0-0.5	12.20.10	0946	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-005-SIV-SD-0.0-0.5MS	12.20.10	0830	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X										SEDIMENT MS/MSD
SED-007-SIV-SD-0.0-0.6	12.20.11	1330	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-008-SIV-SD-0.0-0.5	12.20.10	1039	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-034-SIV-SD-0.0-0.5	12.20.10	1530	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-037-SIV-SD-0.0-0.5	12.20.10	1430	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-044-SA5B-SB-4.0-5.0MS	12.20.10	1138	soil	none	12 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	SUBSURFACE MS/MSD
SL-044-SA5B-SB-4.5MS	12.20.10	1130	soil	none	15 Encore Samplers	X	X		X																				SUBSURFACE MS/MSD
SL-044-SA5B-SB-7.0-8.0	12.20.10	1150	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-044-SA5B-SB-7.5	12.20.10	1147	soil	none	5 Encore Samplers	X	X		X																				
SL-045-SA5B-SB-3.0-4.0	12.20.10	1424	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-045-SA5B-SB-3.5	12.20.10	1420	soil	none	5 Encore Samplers	X	X		X																				
SL-212-SA5B-SS-0.0-0.5	12.20.10	0922	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-213-SA5B-SS-0.0-0.5	12.20.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-214-SA5B-SS-0.0-0.5	12.20.10	0943	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-215-SA5B-SS-0.0-0.5MS	12.20.10	1005	soil	none	2 x 16 oz. jar s& 2 6" sleeves			X			X	X	X	X	X	X		X	X										SURFACE MS/MSD
SL-216-SA5B-SS-0.0-0.5	12.20.10	0931	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-217-SA5B-SS-0.0-0.5	12.20.10	0950	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
~~SL-218-SA5B-SS-0.0-0.5~~	~~12.20.10~~	~~1030~~	~~soil~~	~~none~~	~~1 x 16 oz. jar & 1 6" sleeve~~			~~X~~			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		~~X~~	~~X~~		V	O	I	D					
~~SL-220-SA5B-SS-0.0-0.5~~	~~12.20.10~~	~~1028~~	~~soil~~	~~none~~	~~1 x 16 oz. jar & 1 6" sleeve~~			~~X~~			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		V	O	I	D					
~~SL-221-SA5B-SS-0.0-0.5~~	~~12.20.10~~	~~1100~~	~~soil~~	~~none~~	~~1 x 16 oz. jar & 1 6" sleeve~~			~~X~~			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		~~X~~	~~X~~		V	O	I	D					
SL-255-SA5B-SS-0.0-0.5	12.20.10	1010	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
TB-122010	12.20.10	1230	water	HCl	4-40 mL clear VOA vials	X	X		X																				trip blank

Relinquished by: *(Signature)* — Date/Time: 12.20.10 | 1630

Received by: *(Signature)* — Date/Time:

Received for Laboratory by: *(Signature)* MM — Date/Time: 12/22/10 | 1:05

Airbill No. 00732992

Laboratory: Lancaster Laboratories, Inc.

No. of coolers = 4

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

March 01, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/22/2010
Group Number: 1226678
SDG: DX029
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
DUP01-SIV-QC-122010 Soil	6172046
SED-003-SIV-SD-0.0-0.5 Sediment	6172047
SED-005-SIV-SD-0.0-0.5 Sediment	6172048
SED-005-SIV-SD-0.0-0.5MS Sediment	6172049
SED-005-SIV-SD-0.0-0.5MSD Sediment	6172050
SED-007-SIV-SD-0.0-0.6 Sediment	6172051
SED-008-SIV-SD-0.0-0.5 Sediment	6172052
SED-034-SIV-SD-0.0-0.5 Sediment	6172053
SED-037-SIV-SD-0.0-0.5 Sediment	6172054

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	CDM Federal Services Program	Attn: Todd Burgesser
1 COPY TO	Data Package Group	

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172046
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP01 SDG#: DX029-15FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	20.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172046
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP01 SDG#: DX029-15FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0424	JQ	0.0395	1.26	1
11031	12378-PeCDD	40321-76-4	0.256	JB	0.0514	6.31	1
11031	123478-HxCDD	39227-28-6	0.178	JBQ	0.0576	6.31	1
11031	123678-HxCDD	57653-85-7	0.893	JBQ	0.0590	6.31	1
11031	123789-HxCDD	19408-74-3	0.927	JB	0.0582	6.31	1
11031	1234678-HpCDD	35822-46-9	8.87	B	0.0535	6.31	1
11031	OCDD	3268-87-9	70.8	B	0.0398	12.6	1
11031	2378-TCDF	51207-31-9	4.94		0.119	1.26	1
11650	2378-TCDF-Conf	51207-31-9	4.47	B	0.0501	1.26	1
11031	12378-PeCDF	57117-41-6	1.94	JB	0.0419	6.31	1
11031	23478-PeCDF	57117-31-4	0.819	JB	0.0422	6.31	1
11031	123478-HxCDF	70648-26-9	0.430	JB	0.0477	6.31	1
11031	123678-HxCDF	57117-44-9	0.379	JB	0.0423	6.31	1
11031	123789-HxCDF	72918-21-9	0.430	JB	0.0514	6.31	1
11031	234678-HxCDF	60851-34-5	0.516	JB	0.0456	6.31	1
11031	1234678-HpCDF	67562-39-4	2.18	JB	0.0236	6.31	1
11031	1234789-HpCDF	55673-89-7	0.230	JB	0.0337	6.31	1
11031	OCDF	39001-02-0	3.65	JB	0.0494	12.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-2378-TCDF-Conf	77	24 - 169
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	91	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	95	28 - 143
13C12-1234789-HpCDF	81	26 - 138
13C12-OCDF	79	17 - 157
13C12-1278-TCDD (CRS)	89	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172046
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP01 SDG#: DX029-15FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP01-SIV-QC-122010 Soil
SSFL Area IV Collocated Soil Sampling
DUP01-SIV-QC-122010

LLI Sample # SW 6172046
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:32

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP01 SDG#: DX029-15FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 14:44	Nelson H Risser	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	11012001	02/06/2011 16:13	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-003-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172047
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD03 SDG#: DX029-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	26.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-003-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172047
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD03 SDG#: DX029-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.108	JQ	0.0541	1.35	1
11031	12378-PeCDD	40321-76-4	0.245	JB	0.0816	6.77	1
11031	123478-HxCDD	39227-28-6	0.364	JB	0.0760	6.77	1
11031	123678-HxCDD	57653-85-7	1.06	JB	0.0809	6.77	1
11031	123789-HxCDD	19408-74-3	0.712	JB	0.0752	6.77	1
11031	1234678-HpCDD	35822-46-9	22.1	B	0.0862	6.77	1
11031	OCDD	3268-87-9	223	B	0.0706	13.5	1
11031	2378-TCDF	51207-31-9	0.719	JQ	0.124	1.35	1
11031	12378-PeCDF	57117-41-6	1.98	JB	0.0510	6.77	1
11031	23478-PeCDF	57117-31-4	0.831	JBQ	0.0490	6.77	1
11031	123478-HxCDF	70648-26-9	0.615	JB	0.0536	6.77	1
11031	123678-HxCDF	57117-44-9	0.430	JB	0.0486	6.77	1
11031	123789-HxCDF	72918-21-9	0.294	JB	0.0609	6.77	1
11031	234678-HxCDF	60851-34-5	0.489	JB	0.0522	6.77	1
11031	1234678-HpCDF	67562-39-4	4.73	JB	0.0299	6.77	1
11031	1234789-HpCDF	55673-89-7	0.478	JBQ	0.0502	6.77	1
11031	OCDF	39001-02-0	8.23	JB	0.0748	13.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	60	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	88	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-003-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172047
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD03 SDG#: DX029-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-003-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-003-SIV-SD-0.0-0.5

LLI Sample # SW 6172047
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 09:46

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD03 SDG#: DX029-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 18:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172048
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD05 SDG#: DX029-17BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	19.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172048
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD05 SDG#: DX029-17BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0511	U	0.0511	1.24	1
11031	12378-PeCDD	40321-76-4	0.283	JBQ	0.0578	6.18	1
11031	123478-HxCDD	39227-28-6	0.230	JB	0.0614	6.18	1
11031	123678-HxCDD	57653-85-7	0.918	JB	0.0655	6.18	1
11031	123789-HxCDD	19408-74-3	0.990	JB	0.0604	6.18	1
11031	1234678-HpCDD	35822-46-9	8.71	B	0.0585	6.18	1
11031	OCDD	3268-87-9	62.3	B	0.0467	12.4	1
11031	2378-TCDF	51207-31-9	4.44		0.138	1.24	1
11650	2378-TCDF-Conf	51207-31-9	4.24	B	0.0488	1.24	1
11031	12378-PeCDF	57117-41-6	2.12	JB	0.0476	6.18	1
11031	23478-PeCDF	57117-31-4	0.809	JB	0.0475	6.18	1
11031	123478-HxCDF	70648-26-9	0.388	JBQ	0.0514	6.18	1
11031	123678-HxCDF	57117-44-9	0.404	JBQ	0.0440	6.18	1
11031	123789-HxCDF	72918-21-9	0.473	JB	0.0564	6.18	1
11031	234678-HxCDF	60851-34-5	0.438	JB	0.0491	6.18	1
11031	1234678-HpCDF	67562-39-4	2.11	JB	0.0267	6.18	1
11031	1234789-HpCDF	55673-89-7	0.261	JBQ	0.0391	6.18	1
11031	OCDF	39001-02-0	3.16	JB	0.0512	12.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-2378-TCDF-Conf	73	24 - 169
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	80	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	88	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	76	17 - 157
13C12-1278-TCDD (CRS)	88	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172048
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD05 SDG#: DX029-17BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172048
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD05 SDG#: DX029-17BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 19:40	Nelson H Risser	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	11012001	02/06/2011 20:49	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172049
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD05 SDG#: DX029-17MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	19.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172049
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD05 SDG#: DX029-17MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	26.1		0.107	1.24	1
11031	12378-PeCDD	40321-76-4	132	B	0.115	6.18	1
11031	123478-HxCDD	39227-28-6	131	B	0.110	6.18	1
11031	123678-HxCDD	57653-85-7	127	B	0.114	6.18	1
11031	123789-HxCDD	19408-74-3	129	B	0.110	6.18	1
11031	1234678-HpCDD	35822-46-9	138	B	0.133	6.18	1
11031	OCDD	3268-87-9	335	B	0.108	12.4	1
11031	2378-TCDF	51207-31-9	32.9		0.218	1.24	1
11031	12378-PeCDF	57117-41-6	130	B	0.0880	6.18	1
11031	23478-PeCDF	57117-31-4	130	B	0.0837	6.18	1
11031	123478-HxCDF	70648-26-9	127	B	0.120	6.18	1
11031	123678-HxCDF	57117-44-9	128	B	0.110	6.18	1
11031	123789-HxCDF	72918-21-9	127	B	0.137	6.18	1
11031	234678-HxCDF	60851-34-5	127	B	0.114	6.18	1
11031	1234678-HpCDF	67562-39-4	128	B	0.102	6.18	1
11031	1234789-HpCDF	55673-89-7	127	B	0.143	6.18	1
11031	OCDF	39001-02-0	263	B	0.133	12.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-005-SIV-SD-0.0-0.5MS Sediment**
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172049
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD05 SDG#: DX029-17MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172049
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD05 SDG#: DX029-17MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 20:37	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172050
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD05 SDG#: DX029-17MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	19.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172050
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD05 SDG#: DX029-17MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	25.9		0.0591	1.24	1
11031	12378-PeCDD	40321-76-4	129	B	0.0710	6.18	1
11031	123478-HxCDD	39227-28-6	125	B	0.0635	6.18	1
11031	123678-HxCDD	57653-85-7	127	B	0.0625	6.18	1
11031	123789-HxCDD	19408-74-3	123	B	0.0618	6.18	1
11031	1234678-HpCDD	35822-46-9	132	B	0.0710	6.18	1
11031	OCDD	3268-87-9	310	B	0.0527	12.4	1
11031	2378-TCDF	51207-31-9	31.0		0.127	1.24	1
11031	12378-PeCDF	57117-41-6	128	B	0.0528	6.18	1
11031	23478-PeCDF	57117-31-4	127	B	0.0517	6.18	1
11031	123478-HxCDF	70648-26-9	123	B	0.0889	6.18	1
11031	123678-HxCDF	57117-44-9	124	B	0.0831	6.18	1
11031	123789-HxCDF	72918-21-9	121	B	0.0901	6.18	1
11031	234678-HxCDF	60851-34-5	124	B	0.0867	6.18	1
11031	1234678-HpCDF	67562-39-4	124	B	0.0462	6.18	1
11031	1234789-HpCDF	55673-89-7	123	B	0.0613	6.18	1
11031	OCDF	39001-02-0	257	B	0.0580	12.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	85	25 - 164
13C12-12378-PeCDD	96	25 - 181
13C12-123478-HxCDD	92	32 - 141
13C12-123678-HxCDD	93	28 - 130
13C12-123789-HxCDD	94	28 - 130
13C12-1234678-HpCDD	102	23 - 140
13C12-OCDD	102	17 - 157
13C12-2378-TCDF	86	24 - 169
13C12-12378-PeCDF	98	24 - 185
13C12-23478-PeCDF	96	21 - 178
13C12-123478-HxCDF	85	26 - 152
13C12-123678-HxCDF	90	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	99	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	97	26 - 138
13C12-OCDF	93	17 - 157
13C12-1278-TCDD (CRS)	97	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172050
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD05 SDG#: DX029-17MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-005-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-005-SIV-SD-0.0-0.5

LLI Sample # SW 6172050
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 08:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD05 SDG#: DX029-17MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 21:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-007-SIV-SD-0.0-0.6 Sediment
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172051
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD07 SDG#: DX029-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	17.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-007-SIV-SD-0.0-0.6 Sediment
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172051
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD07 SDG#: DX029-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.130	JQ	0.0521	1.22	1
11031	12378-PeCDD	40321-76-4	0.580	JBQ	0.0908	6.08	1
11031	123478-HxCDD	39227-28-6	0.782	JB	0.109	6.08	1
11031	123678-HxCDD	57653-85-7	2.45	JB	0.0945	6.08	1
11031	123789-HxCDD	19408-74-3	1.39	JB	0.0738	6.08	1
11031	1234678-HpCDD	35822-46-9	46.2	B	0.0968	6.08	1
11031	OCDD	3268-87-9	337	B	0.0752	12.2	1
11031	2378-TCDF	51207-31-9	0.307	J	0.166	1.22	1
11031	12378-PeCDF	57117-41-6	0.751	JB	0.0717	6.08	1
11031	23478-PeCDF	57117-31-4	2.16	JB	0.0807	6.08	1
11031	123478-HxCDF	70648-26-9	3.30	JB	0.142	6.08	1
11031	123678-HxCDF	57117-44-9	1.80	JB	0.106	6.08	1
11031	123789-HxCDF	72918-21-9	0.690	JB	0.0710	6.08	1
11031	234678-HxCDF	60851-34-5	1.90	JB	0.0607	6.08	1
11031	1234678-HpCDF	67562-39-4	8.14	B	0.0928	6.08	1
11031	1234789-HpCDF	55673-89-7	1.00	JB	0.0529	6.08	1
11031	OCDF	39001-02-0	9.62	JB	0.0602	12.2	1

The sample was reported from an extraction of the sample that was outside of the client requested holding time.

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	77	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	52	32 - 141
13C12-123678-HxCDD	58	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	78	23 - 140
13C12-OCDD	75	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	30	26 - 152
13C12-123678-HxCDF	40	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	35	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	62	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-007-SIV-SD-0.0-0.6 Sediment
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172051
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD07 SDG#: DX029-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-007-SIV-SD-0.0-0.6 Sediment
SSFL Area IV Collocated Soil Sampling
SED-007-SIV-SD-0.0-0.6

LLI Sample # SW 6172051
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 13:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD07 SDG#: DX029-18

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11032001	02/07/2011 22:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	2	11032001	02/01/2011 12:30	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-008-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172052
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD08 SDG#: DX029-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	32.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-008-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172052
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD08 SDG#: DX029-19

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0774	U	0.0774	1.49	1
11031	12378-PeCDD	40321-76-4	0.107	U	0.107	7.43	1
11031	123478-HxCDD	39227-28-6	0.444	JBQ	0.102	7.43	1
11031	123678-HxCDD	57653-85-7	1.37	JB	0.103	7.43	1
11031	123789-HxCDD	19408-74-3	1.28	JB	0.100	7.43	1
11031	1234678-HpCDD	35822-46-9	18.9	B	0.0976	7.43	1
11031	OCDD	3268-87-9	180	B	0.0938	14.9	1
11031	2378-TCDF	51207-31-9	1.10	J	0.158	1.49	1
11031	12378-PeCDF	57117-41-6	3.10	JB	0.0749	7.43	1
11031	23478-PeCDF	57117-31-4	1.17	JB	0.0719	7.43	1
11031	123478-HxCDF	70648-26-9	0.673	JB	0.0743	7.43	1
11031	123678-HxCDF	57117-44-9	0.695	JB	0.0701	7.43	1
11031	123789-HxCDF	72918-21-9	0.331	JBQ	0.0874	7.43	1
11031	234678-HxCDF	60851-34-5	0.653	JB	0.0738	7.43	1
11031	1234678-HpCDF	67562-39-4	3.91	JB	0.0730	7.43	1
11031	1234789-HpCDF	55673-89-7	0.517	JBQ	0.0941	7.43	1
11031	OCDF	39001-02-0	7.73	JB	0.119	14.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	74	17 - 157
13C12-1278-TCDD (CRS)	89	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-008-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172052
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD08 SDG#: DX029-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-008-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-008-SIV-SD-0.0-0.5

LLI Sample # SW 6172052
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 10:39

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD08 SDG#: DX029-19

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/28/2011 23:27	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-034-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172053
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD34 SDG#: DX029-20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	22.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-034-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172053
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD34 SDG#: DX029-20

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0506	U	0.0506	1.29	1
11031	12378-PeCDD	40321-76-4	0.0979	JB	0.0481	6.43	1
11031	123478-HxCDD	39227-28-6	0.139	JBQ	0.0623	6.43	1
11031	123678-HxCDD	57653-85-7	0.303	JBQ	0.0674	6.43	1
11031	123789-HxCDD	19408-74-3	0.266	JB	0.0620	6.43	1
11031	1234678-HpCDD	35822-46-9	3.56	JB	0.0862	6.43	1
11031	OCDD	3268-87-9	21.4	B	0.0742	12.9	1
11031	2378-TCDF	51207-31-9	0.194	JQ	0.0753	1.29	1
11031	12378-PeCDF	57117-41-6	0.190	JB	0.0389	6.43	1
11031	23478-PeCDF	57117-31-4	0.572	JB	0.0386	6.43	1
11031	123478-HxCDF	70648-26-9	0.258	JBQ	0.0509	6.43	1
11031	123678-HxCDF	57117-44-9	0.215	JB	0.0469	6.43	1
11031	123789-HxCDF	72918-21-9	0.133	JBQ	0.0553	6.43	1
11031	234678-HxCDF	60851-34-5	0.369	JB	0.0490	6.43	1
11031	1234678-HpCDF	67562-39-4	1.40	JB	0.0540	6.43	1
11031	1234789-HpCDF	55673-89-7	0.183	JBQ	0.0725	6.43	1
11031	OCDF	39001-02-0	2.13	JB	0.0815	12.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	86	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	86	28 - 143
13C12-1234789-HpCDF	80	26 - 138
13C12-OCDF	76	17 - 157
13C12-1278-TCDD (CRS)	88	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-034-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172053
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD34 SDG#: DX029-20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-034-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-034-SIV-SD-0.0-0.5

LLI Sample # SW 6172053
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 15:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD34 SDG#: DX029-20

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/29/2011 00:24	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-037-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172054
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD37 SDG#: DX029-21*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	28.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-037-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172054
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD37 SDG#: DX029-21*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.139	JQ	0.0807	1.40	1
11031	12378-PeCDD	40321-76-4	0.903	JBQ	0.121	6.98	1
11031	123478-HxCDD	39227-28-6	0.876	JB	0.0732	6.98	1
11031	123678-HxCDD	57653-85-7	3.80	JB	0.0788	6.98	1
11031	123789-HxCDD	19408-74-3	2.40	JB	0.0728	6.98	1
11031	1234678-HpCDD	35822-46-9	95.9	B	0.104	6.98	1
11031	OCDD	3268-87-9	692	B	0.111	14.0	1
11031	2378-TCDF	51207-31-9	1.19	J	0.152	1.40	1
11031	12378-PeCDF	57117-41-6	1.57	JB	0.0606	6.98	1
11031	23478-PeCDF	57117-31-4	1.16	JB	0.0578	6.98	1
11031	123478-HxCDF	70648-26-9	0.857	JB	0.0630	6.98	1
11031	123678-HxCDF	57117-44-9	0.664	JB	0.0589	6.98	1
11031	123789-HxCDF	72918-21-9	0.353	JBQ	0.0656	6.98	1
11031	234678-HxCDF	60851-34-5	0.819	JB	0.0603	6.98	1
11031	1234678-HpCDF	67562-39-4	4.92	JB	0.0450	6.98	1
11031	1234789-HpCDF	55673-89-7	0.454	JB	0.0570	6.98	1
11031	OCDF	39001-02-0	8.47	JB	0.0793	14.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	78	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-037-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172054
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD37 SDG#: DX029-21*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-037-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-037-SIV-SD-0.0-0.5

LLI Sample # SW 6172054
LLI Group # 1226678
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/20/2010 14:30

Submitted: 12/22/2010 10:55
Reported: 03/01/2011 16:27

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD37 SDG#: DX029-21*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11012001	01/29/2011 01:20	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11012001	01/12/2011 13:35	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11006162401A	01/06/2011 18:26	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226678
Reported: 03/01/11 at 04:27 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11006162401A	Sample number(s): 6172046-6172054								
28a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11012001	Sample number(s): 6172046-6172050,6172052-6172054								
2378-TCDD	0.0393 U	0.0393	1.00	ng/kg	102		67-158		
12378-PeCDD	0.199 J	0.0435	5.00	ng/kg	101		70-142		
123478-HxCDD	0.147 J	0.0378	5.00	ng/kg	99		70-164		
123678-HxCDD	0.162 J	0.0378	5.00	ng/kg	101		76-134		
123789-HxCDD	0.167 J	0.0372	5.00	ng/kg	98		64-162		
1234678-HpCDD	0.437 J	0.0525	5.00	ng/kg	100		70-140		
OCDD	1.37 J	0.0491	10.0	ng/kg	100		78-144		
2378-TCDF	0.0396 U	0.0396	1.00	ng/kg	106		75-158		
2378-TCDF-Conf	0.0679 J	0.0199	1.00	ng/kg					
12378-PeCDF	0.199 J	0.0246	5.00	ng/kg	99		80-134		
23478-PeCDF	0.230 J	0.0245	5.00	ng/kg	101		68-160		
123478-HxCDF	0.209 J	0.0352	5.00	ng/kg	99		72-134		
123678-HxCDF	0.226 J	0.0317	5.00	ng/kg	98		84-130		
123789-HxCDF	0.206 J	0.0395	5.00	ng/kg	98		78-130		
234678-HxCDF	0.207 J	0.0339	5.00	ng/kg	98		70-156		
1234678-HpCDF	1.49 J	0.0429	5.00	ng/kg	97		82-122		
1234789-HpCDF	0.200 J	0.0602	5.00	ng/kg	98		78-138		
OCDF	0.495 J	0.0525	10.0	ng/kg	99		63-170		
Batch number: 11032001	Sample number(s): 6172051								
2378-TCDD	0.0323 U	0.0323	1.00	ng/kg	97		67-158		
12378-PeCDD	0.0510 J	0.0302	5.00	ng/kg	103		70-142		
123478-HxCDD	0.0361 J	0.0209	5.00	ng/kg	103		70-164		
123678-HxCDD	0.0384 J	0.0219	5.00	ng/kg	102		76-134		
123789-HxCDD	0.0359 J	0.0204	5.00	ng/kg	100		64-162		
1234678-HpCDD	0.219 J	0.0316	5.00	ng/kg	103		70-140		
OCDD	0.513 J	0.0319	10.0	ng/kg	103		78-144		
2378-TCDF	0.0349 U	0.0349	1.00	ng/kg	111		75-158		
12378-PeCDF	0.0415 J	0.0151	5.00	ng/kg	101		80-134		
23478-PeCDF	0.106 J	0.0150	5.00	ng/kg	102		68-160		
123478-HxCDF	0.0659 J	0.0165	5.00	ng/kg	101		72-134		
123678-HxCDF	0.0508 J	0.0145	5.00	ng/kg	99		84-130		
123789-HxCDF	0.0588 J	0.0187	5.00	ng/kg	104		78-130		
234678-HxCDF	0.0823 J	0.0153	5.00	ng/kg	100		70-156		
1234678-HpCDF	0.242 J	0.0145	5.00	ng/kg	103		82-122		
1234789-HpCDF	0.0453 J	0.0190	5.00	ng/kg	102		78-138		
OCDF	0.298 J	0.0355	10.0	ng/kg	98		63-170		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226678
Reported: 03/01/11 at 04:27 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11006162401A	Sample number(s): 6172046-6172054					BKG: P172038			
28a Moisture Content by 160.3						19.1	20.3	6	20
Batch number: 11012001	Sample number(s): 6172046-6172050,6172052-6172054					UNSPK: 6172048			
2378-TCDD	106	105	67-158	1	25				
12378-PeCDD	106	104	70-142	2	25				
123478-HxCDD	106	101	70-164	5	25				
123678-HxCDD	102	102	76-134	0	25				
123789-HxCDD	103	99	64-162	5	25				
1234678-HpCDD	104	100	70-140	4	25				
OCDD	110	100	78-144	8	25				
2378-TCDF	115	108	75-158	6	25				
12378-PeCDF	103	102	80-134	2	25				
23478-PeCDF	105	102	68-160	3	25				
123478-HxCDF	103	99	72-134	4	25				
123678-HxCDF	103	100	84-130	3	25				
123789-HxCDF	102	98	78-130	5	25				
234678-HxCDF	102	100	70-156	2	25				
1234678-HpCDF	102	99	82-122	3	25				
1234789-HpCDF	102	99	78-138	3	25				
OCDF	105	103	63-170	2	25				
Batch number: 11032001	Sample number(s): 6172051					UNSPK: P189234			
2378-TCDD	92	95	67-158	4	25				
12378-PeCDD	100	98	70-142	1	25				
123478-HxCDD	97	96	70-164	1	25				
123678-HxCDD	94	101	76-134	7	25				
123789-HxCDD	95	100	64-162	6	25				
1234678-HpCDD	99	83	70-140	15	25				
OCDD	146*	26*	78-144	66*	25				
2378-TCDF	105	112	75-158	7	25				
12378-PeCDF	102	98	80-134	4	25				
23478-PeCDF	98	98	68-160	1	25				
123478-HxCDF	100	95	72-134	5	25				
123678-HxCDF	105	106	84-130	1	25				
123789-HxCDF	96	93	78-130	3	25				
234678-HxCDF	89	101	70-156	13	25				
1234678-HpCDF	93	96	82-122	3	25				
1234789-HpCDF	94	96	78-138	2	25				
OCDF	97	98	63-170	1	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226678
Reported: 03/01/11 at 04:27 PM

Surrogate Quality Control

Batch number: 11012001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6172046	76	82	75	82	77	83
6172047	74	85	75	79	76	79
6172048	72	80	72	80	74	76
6172049	66	76	70	74	70	70
6172050	85	96	85	90	87	99
6172052	73	82	73	75	73	72
6172053	75	83	73	76	73	78
6172054	74	84	72	73	72	77
Blank	76	80	76	82	78	83
MS	66	76	70	74	70	70
MSD	85	96	85	90	87	99
OPR	73	72	73	77	74	80
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6172046	95	81	79	89	83	83
6172047	81	60	60	88	84	80
6172048	88	78	76	88	83	80
6172049	84	75	73	82	77	75
6172050	101	97	93	97	96	92
6172052	80	78	74	89	83	79
6172053	86	80	76	88	85	80
6172054	78	79	75	87	84	76
Blank	96	86	83	95	83	85
MS	84	75	73	82	77	75
MSD	101	97	93	97	96	92
OPR	90	79	75	89	77	81
Limits:	28-143	26-138	17-157	35-197	25-181	32-141

	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6172046	82	84	90	91	77	86
6172047	79	79	82	82	79	85
6172048	78	80	86	87	74	86
6172049	76	75	81	82	68	78
6172050	93	94	102	102	86	98
6172052	78	79	81	80	76	81
6172053	79	80	86	85	76	84
6172054	76	76	82	81	77	83
Blank	86	86	96	95	75	83
MS	76	75	81	82	68	78
MSD	93	94	102	102	86	98
OPR	81	81	89	86	71	75
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

	13C12-2378-TCDF-Conf
6172046	77
6172047	

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226678
Reported: 03/01/11 at 04:27 PM

Surrogate Quality Control

6172048 73
6172049
6172050
6172052
6172053
6172054
Blank 78
MS
MSD
OPR

Limits: 24-169

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11032001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6172051	77	61	30	40	72	73
Blank	76	80	75	83	79	82
MS	97	80	69	82	63	77
MSD	78	60	54	78	71	59
OPR	65	55	69	66	72	80
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6172051	35	79	62	80	73	52
Blank	84	86	85	96	80	86
MS	64	52	50	83	118	63
MSD	70	64	85	85	63	64
OPR	86	84	84	78	68	73
Limits:	28-143	26-138	17-157	35-197	25-181	32-141

	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6172051	58	75	78	75	73	73
Blank	83	88	95	86	63	83
MS	64	75	67	130	72	76
MSD	65	75	67	97	73	67
OPR	78	80	93	91	58	59
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1226678 6172046-54

CHAIN OF CUSTODY RECORD

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	TPH-EFH EPA 8015B Mod.	*Metals EPA 6010/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
DUP01-SIV-QC-122010	12.20.10	0832	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										SEDIMENT DUP
DUP09-SA5B-QC-122010	12.20.10	1011	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										SURFACE DUP
DUP14-SA5B-QC-122010	12.20.10	1439	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	SUBSURFACE DUP
DUP14-SA5B-QC-122010	12.20.10	1439	soil	none	5 Encore Samplers	X	X		X																				SUBSURFACE DUP
EB06-SA5B-122010	12.20.10	1235	water	none	6-1 liter ambers			X						X	X			X	X										surface tool rinsate
EB06-SA5B-122010	12.20.10	1235	water	none	1-500 ml poly							X	X			X													surface tool rinsate
EB06-SA5B-122010	12.20.10	1235	water	HNO3	1-500 ml poly						X																		surface tool rinsate
SED-003-SIV-SD-0.0-0.5	12.20.10	0946	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-005-SIV-SD-0.0-0.5MS	12.20.10	0830	soil	none	2 x 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X										SEDIMENT MS/MSD
SED-007-SIV-SD-0.0-0.6	12.20.11	1330	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-008-SIV-SD-0.0-0.5	12.20.10	1039	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-034-SIV-SD-0.0-0.5	12.20.10	1530	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-037-SIV-SD-0.0-0.5	12.20.10	1430	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-044-SA5B-SB-4.0-5.0MS	12.20.10	1138	soil	none	12 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	SUBSURFACE MS/MSD
SL-044-SA5B-SB-4.5MS	12.20.10	1130	soil	none	15 Encore Samplers	X	X		X																				SUBSURFACE MS/MSD
SL-044-SA5B-SB-7.0-8.0	12.20.10	1150	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-044-SA5B-SB-7.5	12.20.10	1147	soil	none	5 Encore Samplers	X	X		X																				
SL-045-SA5B-SB-3.0-4.0	12.20.10	1424	soil	none	4 16 oz. jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-045-SA5B-SB-3.5	12.20.10	1420	soil	none	5 Encore Samplers	X	X		X																				
SL-212-SA5B-SS-0.0-0.5	12.20.10	0922	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-213-SA5B-SS-0.0-0.5	12.20.10	0915	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-214-SA5B-SS-0.0-0.5	12.20.10	0943	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-215-SA5B-SS-0.0-0.5MS	12.20.10	1005	soil	none	2 x 16 oz. jar s& 2 6" sleeves			X			X	X	X	X	X	X		X	X										SURFACE MS/MSD
SL-216-SA5B-SS-0.0-0.5	12.20.10	0931	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-217-SA5B-SS-0.0-0.5	12.20.10	0950	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
~~SL-218-SA5B-SS-0.0-0.5~~	~~12.20.10~~	~~1030~~	~~soil~~	~~none~~	~~1 x 16 oz. jar & 1 6" sleeve~~			~~X~~			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		~~X~~	~~X~~		~~V~~	~~O~~	~~I~~	~~D~~					
~~SL-220-SA5B-SS-0.0-0.5~~	~~12.20.10~~	~~1028~~	~~soil~~	~~none~~	~~1 x 16 oz. jar & 1 6" sleeve~~			~~X~~			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		~~V~~	~~O~~	~~I~~	~~D~~					
~~SL-221-SA5B-SS-0.0-0.5~~	~~12.20.10~~	~~1100~~	~~soil~~	~~none~~	~~1 x 16 oz. jar & 1 6" sleeve~~			~~X~~			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~		~~X~~	~~X~~		~~V~~	~~O~~	~~I~~	~~D~~					
SL-255-SA5B-SS-0.0-0.5	12.20.10	1010	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
TB-122010	12.20.10	1230	water	HCl	4-40 mL clear VOA vials	X	X		X																				trip blank

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Laboratory:
	12.20.10 | 1630	MJM	12/22/10 1055	Lancaster Laboratories, Inc.
Received by: (Signature)	**Date/Time**	**Airbill No.**		No. of coolers = 4
		00732992		

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 04, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/22/2010
Group Number: 1226717
SDG: DE050
PO Number: 1203-004-007-AL
Release Number: Tracking #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
DUP02-SIV-QC-122110 Soil	6172315
SED-002-SIV-SD-0.0-0.5 Sediment	6172316
SED-002-SIV-SD-0.0-0.5MS Sediment	6172317
SED-002-SIV-SD-0.0-0.5MSD Sediment	6172318
SED-002-SIV-SD-0.0-0.5DUP Sediment	6172319
SED-015-SIV-SD-0.0-0.5 Sediment	6172320
SED-036-SIV-SD-0.0-0.5 Sediment	6172321
SED-038-SIV-SD-0.0-0.5 Sediment	6172322
SED-039-SIV-SD-0.0-0.5 Sediment	6172323

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	CDM Federal Services Program	Attn: Todd Burgesser
1 COPY TO	Data Package Group	

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

Robert Heisey

Robert Heisey
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172315
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SDP02 SDG#: DE050-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	200	U	200	590	1
04688	Benzidine	92-87-5	1,400	U	1,400	4,000	1
04688	Benzoic acid	65-85-0	200	U	200	590	1
04688	Benzyl alcohol	100-51-6	200	U	200	590	1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200	1
04688	Carbazole	86-74-8	20	U	20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	40	U	40	200	1
04688	4-Chloroaniline	106-47-8	79	U	79	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200	1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200	1
04688	2-Chlorophenol	95-57-8	20	U	20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U	40	200	1
04688	Dibenzofuran	132-64-9	20	U	20	200	1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200	1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200	1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	400	1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200	1
04688	2,4-Dimethylphenol	105-67-9	40	U	40	200	1
04688	3,5-Dimethylphenol	108-68-9	40	U	40	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	590	1
04688	2,4-Dinitrophenol	51-28-5	790	U	790	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	40	U	40	200	1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	87	J	20	400	1
04688	Hexachlorobenzene	118-74-1	20	U	20	200	1
04688	Hexachlorobutadiene	87-68-3	79	U	79	200	1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	590	1
04688	Hexachloroethane	67-72-1	20	U	20	200	1
04688	Isophorone	78-59-1	20	U	20	200	1
04688	2-Methylphenol	95-48-7	40	U	40	200	1
04688	4-Methylphenol	106-44-5	40	U	40	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U	20	200	1
04688	3-Nitroaniline	99-09-2	40	U	40	200	1
04688	4-Nitroaniline	100-01-6	79	U	79	200	1
04688	Nitrobenzene	98-95-3	20	U	20	200	1
04688	2-Nitrophenol	88-75-5	20	U	20	200	1
04688	4-Nitrophenol	100-02-7	200	U	200	590	1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U	200	590	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172315
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SDP02 SDG#: DE050-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	20	U	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	40	U	40	200	1
04688	2,4,6-Trichlorophenol	88-06-2	40	U	40	200	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.79	U	0.79	2.0	1
10138	Acenaphthylene	208-96-8	0.47	J	0.40	2.0	1
10138	Anthracene	120-12-7	0.40	U	0.40	2.0	1
10138	Benzo(a)anthracene	56-55-3	0.79	U	0.79	2.0	1
10138	Benzo(a)pyrene	50-32-8	0.79	U	0.79	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	1.5	J	0.79	2.0	1
10138	Benzo(g,h,i)perylene	191-24-2	0.79	U	0.79	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	0.79	U	0.79	2.0	1
10138	Butylbenzylphthalate	85-68-7	7.1	U	7.1	21	1
10138	Di-n-butylphthalate	84-74-2	7.1	U	7.1	21	1
10138	Chrysene	218-01-9	1.1	J	0.40	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	0.79	U	0.79	2.0	1
10138	Diethylphthalate	84-66-2	7.1	U	7.1	21	1
10138	Dimethylphthalate	131-11-3	7.1	U	7.1	21	1
10138	Fluoranthene	206-44-0	1.6	J	0.79	2.0	1
10138	Fluorene	86-73-7	0.79	U	0.79	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.79	U	0.79	2.0	1
10138	1-Methylnaphthalene	90-12-0	0.79	U	0.79	2.0	1
10138	2-Methylnaphthalene	91-57-6	0.79	U	0.79	2.0	1
10138	Naphthalene	91-20-3	2.4		0.79	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	0.79	U	0.79	2.0	1
10138	Di-n-octylphthalate	117-84-0	7.1	U	7.1	21	1
10138	Phenanthrene	85-01-8	1.1	J	0.79	2.0	1
10138	Pyrene	129-00-0	1.1	J	0.79	2.0	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.3	1
10401	Dalapon	75-99-0	5.2	U	5.2	11	1
10401	2,4-DB	94-82-6	4.4	U	4.4	4.4	1
10401	Dicamba	1918-00-9	1.2	J	0.48	1.4	1
10401	Dinoseb	88-85-7	0.95	U	0.95	2.9	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.96	J	0.95	2.0	1
10401	MCPA	94-74-6	90	U	90	300	1
10401	MCPP (Mecoprop)	93-65-2	89	U	89	300	1
10401	2,4,5-T	93-76-5	0.098	U	0.098	0.20	1
10401	2,4,5-TP	93-72-1	0.18	J	0.089	0.20	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172315
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SDP02 SDG#: DE050-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	cases, the reporting limits have been raised. The following compound was affected: 2,4-DB.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.078	U	0.078	0.20	1
01363	Alpha BHC	319-84-6	0.040	U	0.040	0.20	1
01363	Beta BHC	319-85-7	0.071	U	0.071	0.20	1
01363	Gamma BHC - Lindane	58-89-9	0.040	U	0.040	0.20	1
01363	Chlordane	57-74-9	0.95	U	0.95	4.0	1
01363	p,p-DDD	72-54-8	0.078	U	0.078	0.40	1
01363	p,p-DDE	72-55-9	0.27	U	0.27	0.40	1
01363	p,p-DDT	50-29-3	0.49	U	0.49	0.49	1
01363	Delta BHC	319-86-8	0.043	U	0.043	0.20	1
01363	Dieldrin	60-57-1	0.078	U	0.078	0.40	1
01363	Endosulfan I	959-98-8	0.052	U	0.052	0.20	1
01363	Endosulfan II	33213-65-9	0.078	U	0.078	0.40	1
01363	Endosulfan Sulfate	1031-07-8	0.23	U	0.23	0.40	1
01363	Endrin	72-20-8	0.078	U	0.078	0.40	1
01363	Endrin Aldehyde	7421-93-4	0.078	U	0.078	0.40	1
01363	Endrin Ketone	53494-70-5	0.078	U	0.078	0.40	1
01363	Heptachlor	76-44-8	0.071	U	0.071	0.20	1
01363	Heptachlor Epoxide	1024-57-3	0.040	U	0.040	0.20	1
01363	Methoxychlor	72-43-5	0.40	U	0.40	2.0	1
01363	Mirex	2385-85-5	0.15	U	0.15	0.40	1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.8	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.9	1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.9	1
10225	Aroclor 5460	11126-42-4	1.9	J	1.2	3.9	1
10225	PCB-1016	12674-11-2	0.39	U	0.39	2.0	1
10225	PCB-1221	11104-28-2	0.59	U	0.59	2.0	1
10225	PCB-1232	11141-16-5	0.62	U	0.62	2.0	1
10225	PCB-1242	53469-21-9	0.59	U	0.59	2.0	1
10225	PCB-1248	12672-29-6	0.39	U	0.39	2.0	1
10225	PCB-1254	11097-69-1	0.39	U	0.39	2.0	1
10225	PCB-1260	11096-82-5	0.68	J	0.39	2.0	1
10225	PCB-1262	37324-23-5	0.39	U	0.39	2.0	1
10225	PCB-1268	11100-14-4	0.39	U	0.39	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172315
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SDP02 SDG#: DE050-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,700		5.70	22.6	1
07914	Boron	7440-42-8	4.68	J	1.01	5.66	1
01650	Calcium	7440-70-2	2,800		6.94	22.6	1
01654	Iron	7439-89-6	20,400		5.33	22.6	1
01656	Lithium	7439-93-2	26.9		0.25	2.3	1
01657	Magnesium	7439-95-4	5,760		2.88	11.3	1
06958	Manganese	7439-96-5	300		0.0883	0.566	1
10145	Phosphorus	7723-14-0	487		0.634	11.3	1
01662	Potassium	7440-09-7	3,540		20.4	56.6	1
01667	Sodium	7440-23-5	70.3	J	42.2	113	1
07968	Strontium	7440-24-6	13.3		0.0702	0.566	1
06969	Tin	7440-31-5	2.02	J	1.13	11.3	1
06970	Titanium	7440-32-6	1,260		0.430	1.13	1
10146	Zirconium	7440-67-7	3.82	J	0.951	5.66	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0806	J	0.0686	0.229	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.94		0.0686	0.457	2
06126	Barium	7440-39-3	112		0.123	0.457	2
06127	Beryllium	7440-41-7	0.565		0.0183	0.114	2
06128	Cadmium	7440-43-9	0.239		0.0412	0.114	2
06131	Chromium	7440-47-3	22.0		0.137	0.457	2
06132	Cobalt	7440-48-4	6.50		0.0229	0.114	2
06133	Copper	7440-50-8	9.16		0.0755	0.457	2
06135	Lead	7439-92-1	10.3		0.0119	0.229	2
06138	Molybdenum	7439-98-7	0.545		0.0572	0.114	2
06139	Nickel	7440-02-0	13.1		0.114	0.457	2
06141	Selenium	7782-49-2	0.131	J	0.0457	0.457	2
06142	Silver	7440-22-4	0.0362	J	0.0137	0.114	2
06145	Thallium	7440-28-0	0.282		0.0343	0.114	2
06148	Vanadium	7440-62-2	45.8		0.0252	0.114	2
06149	Zinc	7440-66-6	82.1		0.640	3.43	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032	U	0.0032	0.110	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.95	U	0.95	1.2	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.7	U	10.7	35.7	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172315
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SDP02 SDG#: DE050-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.31	J	0.24	1.2	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	522		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.52		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	15.9		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 05:02	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 13:19	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 15:35	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 10:20	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/06/2011 18:41	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172315
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SDP02 SDG#: DE050-01FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:39	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 11:08	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 11:08	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 11:08	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 11:08	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:45	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 10:32	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 19:01	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 20:45	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	200	U	200	600	1
04688	Benzidine	92-87-5	1,400	U	1,400	4,000	1
04688	Benzoic acid	65-85-0	200	U	200	600	1
04688	Benzyl alcohol	100-51-6	200	U	200	600	1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200	1
04688	Carbazole	86-74-8	20	U	20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	40	U	40	200	1
04688	4-Chloroaniline	106-47-8	80	U	80	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200	1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200	1
04688	2-Chlorophenol	95-57-8	20	U	20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	40	U	40	200	1
04688	Dibenzofuran	132-64-9	20	U	20	200	1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200	1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200	1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	400	1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200	1
04688	2,4-Dimethylphenol	105-67-9	40	U	40	200	1
04688	3,5-Dimethylphenol	108-68-9	40	U	40	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	600	1
04688	2,4-Dinitrophenol	51-28-5	800	U	800	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	40	U	40	200	1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	45	J	20	400	1
04688	Hexachlorobenzene	118-74-1	20	U	20	200	1
04688	Hexachlorobutadiene	87-68-3	80	U	80	200	1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	600	1
04688	Hexachloroethane	67-72-1	20	U	20	200	1
04688	Isophorone	78-59-1	20	U	20	200	1
04688	2-Methylphenol	95-48-7	40	U	40	200	1
04688	4-Methylphenol	106-44-5	40	U	40	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U	20	200	1
04688	3-Nitroaniline	99-09-2	40	U	40	200	1
04688	4-Nitroaniline	100-01-6	80	U	80	200	1
04688	Nitrobenzene	98-95-3	20	U	20	200	1
04688	2-Nitrophenol	88-75-5	20	U	20	200	1
04688	4-Nitrophenol	100-02-7	200	U	200	600	1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U	200	600	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	20	U	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	40	U	40	200	1
04688	2,4,6-Trichlorophenol	88-06-2	40	U	40	200	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.80	U	0.80	2.0	1
10138	Acenaphthylene	208-96-8	0.40	U	0.40	2.0	1
10138	Anthracene	120-12-7	0.40	U	0.40	2.0	1
10138	Benzo(a)anthracene	56-55-3	0.80	U	0.80	2.0	1
10138	Benzo(a)pyrene	50-32-8	0.80	U	0.80	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	1.3	J	0.80	2.0	1
10138	Benzo(g,h,i)perylene	191-24-2	0.80	U	0.80	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	0.80	U	0.80	2.0	1
10138	Butylbenzylphthalate	85-68-7	7.2	U	7.2	22	1
10138	Di-n-butylphthalate	84-74-2	7.2	U	7.2	22	1
10138	Chrysene	218-01-9	0.90	J	0.40	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	U	0.80	2.0	1
10138	Diethylphthalate	84-66-2	7.2	U	7.2	22	1
10138	Dimethylphthalate	131-11-3	7.2	U	7.2	22	1
10138	Fluoranthene	206-44-0	1.1	J	0.80	2.0	1
10138	Fluorene	86-73-7	0.80	U	0.80	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	U	0.80	2.0	1
10138	1-Methylnaphthalene	90-12-0	0.80	U	0.80	2.0	1
10138	2-Methylnaphthalene	91-57-6	0.80	U	0.80	2.0	1
10138	Naphthalene	91-20-3	2.6		0.80	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	0.80	U	0.80	2.0	1
10138	Di-n-octylphthalate	117-84-0	7.2	U	7.2	22	1
10138	Phenanthrene	85-01-8	0.93	J	0.80	2.0	1
10138	Pyrene	129-00-0	1.3	J	0.80	2.0	1
	The GC/MS semivolatile internal standard peak areas are outside of QC limits. The matrix spike sample was analyzed and internal standard peak areas are again outside of QC limits, indicating a matrix effect.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.3	1
10401	Dalapon	75-99-0	5.3	U	5.3	11	1
10401	2,4-DB	94-82-6	3.7	U	3.7	3.7	1
10401	Dicamba	1918-00-9	0.48	U	0.48	1.4	1
10401	Dinoseb	88-85-7	0.96	U	0.96	2.9	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.96	U	0.96	2.0	1
10401	MCPA	94-74-6	91	U	91	300	1
10401	MCPP (Mecoprop)	93-65-2	90	U	90	300	1
10401	2,4,5-T	93-76-5	0.098	U	0.098	0.20	1
10401	2,4,5-TP	93-72-1	0.090	U	0.090	0.20	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compound was affected: 2,4-DB.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.079	U	0.079	0.20	1
01363	Alpha BHC	319-84-6	0.041	U	0.041	0.20	1
01363	Beta BHC	319-85-7	0.072	U	0.072	0.20	1
01363	Gamma BHC - Lindane	58-89-9	0.041	U	0.041	0.20	1
01363	Chlordane	57-74-9	0.96	U	0.96	4.1	1
01363	p,p-DDD	72-54-8	0.079	U	0.079	0.41	1
01363	p,p-DDE	72-55-9	0.39	U	0.39	0.41	1
01363	p,p-DDT	50-29-3	0.55	U	0.55	0.55	1
01363	Delta BHC	319-86-8	0.043	U	0.043	0.20	1
01363	Dieldrin	60-57-1	0.079	U	0.079	0.41	1
01363	Endosulfan I	959-98-8	0.057	U	0.057	0.20	1
01363	Endosulfan II	33213-65-9	0.079	U	0.079	0.41	1
01363	Endosulfan Sulfate	1031-07-8	0.27	U	0.27	0.41	1
01363	Endrin	72-20-8	0.079	U	0.079	0.41	1
01363	Endrin Aldehyde	7421-93-4	0.079	U	0.079	0.41	1
01363	Endrin Ketone	53494-70-5	0.079	U	0.079	0.41	1
01363	Heptachlor	76-44-8	0.072	U	0.072	0.20	1
01363	Heptachlor Epoxide	1024-57-3	0.041	U	0.041	0.20	1
01363	Methoxychlor	72-43-5	0.41	U	0.41	2.0	1
01363	Mirex	2385-85-5	0.13	U	0.13	0.41	1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.9	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.9	1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.9	1
10225	Aroclor 5460	11126-42-4	1.3	J	1.2	3.9	1
10225	PCB-1016	12674-11-2	0.39	U	0.39	2.0	1
10225	PCB-1221	11104-28-2	0.60	U	0.60	2.0	1
10225	PCB-1232	11141-16-5	0.62	U	0.62	2.0	1
10225	PCB-1242	53469-21-9	0.60	U	0.60	2.0	1
10225	PCB-1248	12672-29-6	0.39	U	0.39	2.0	1
10225	PCB-1254	11097-69-1	0.39	U	0.39	2.0	1
10225	PCB-1260	11096-82-5	0.65	J	0.39	2.0	1
10225	PCB-1262	37324-23-5	0.39	U	0.39	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	PCB-1268	11100-14-4	0.39	U	0.39	2.0	1
	The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,600		5.73	22.8	1
07914	Boron	7440-42-8	4.65	J	1.01	5.70	1
01650	Calcium	7440-70-2	2,940		6.98	22.8	1
01654	Iron	7439-89-6	22,100		5.37	22.8	1
01656	Lithium	7439-93-2	29.2		0.25	2.3	1
01657	Magnesium	7439-95-4	6,260		2.89	11.4	1
06958	Manganese	7439-96-5	332		0.0889	0.570	1
10145	Phosphorus	7723-14-0	501		0.638	11.4	1
01662	Potassium	7440-09-7	3,940		20.5	57.0	1
01667	Sodium	7440-23-5	74.9	J	42.5	114	1
07968	Strontium	7440-24-6	13.6		0.0706	0.570	1
06969	Tin	7440-31-5	2.11	J	1.14	11.4	1
06970	Titanium	7440-32-6	1,360		0.433	1.14	1
10146	Zirconium	7440-67-7	4.42	J	0.957	5.70	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.111	J	0.0704	0.235	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.18		0.0704	0.469	2
06126	Barium	7440-39-3	104		0.127	0.469	2
06127	Beryllium	7440-41-7	0.574		0.0188	0.117	2
06128	Cadmium	7440-43-9	0.233		0.0422	0.117	2
06131	Chromium	7440-47-3	20.4		0.141	0.469	2
06132	Cobalt	7440-48-4	5.89		0.0235	0.117	2
06133	Copper	7440-50-8	8.69		0.0774	0.469	2
06135	Lead	7439-92-1	10.0		0.0122	0.235	2
06138	Molybdenum	7439-98-7	0.457		0.0586	0.117	2
06139	Nickel	7440-02-0	12.1		0.117	0.469	2
06141	Selenium	7782-49-2	0.153	J	0.0469	0.469	2
06142	Silver	7440-22-4	0.0286	J	0.0141	0.117	2
06145	Thallium	7440-28-0	0.296		0.0352	0.117	2
06148	Vanadium	7440-62-2	42.4		0.0258	0.117	2
06149	Zinc	7440-66-6	70.9		0.657	3.52	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0033	U	0.0033	0.114	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.1	J	0.96	1.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 314.0**		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8	U	10.8	35.9	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.25	J	0.24	1.2	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	536		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified	**Std. Units**			**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.51		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**	**%**			**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	16.4		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 03:47	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 01:27	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 16:03	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 10:35	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/06/2011 18:59	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 17:24	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:01	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:01	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:01	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:01	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:46	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 09:49	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 17:51	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 20:57	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172316
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900		20	200	1
04688	Acenaphthylene	208-96-8	2,000		20	200	1
04688	Aniline	62-53-3	1,500		200	600	1
04688	Anthracene	120-12-7	1,900		20	200	1
04688	Benzidine	92-87-5	2,500	J	1,400	4,000	1
04688	Benzo(a)anthracene	56-55-3	1,900		20	200	1
04688	Benzo(a)pyrene	50-32-8	1,700		20	200	1
04688	Benzo(b)fluoranthene	205-99-2	1,600		20	200	1
04688	Benzo(g,h,i)perylene	191-24-2	1,700		20	200	1
04688	Benzo(k)fluoranthene	207-08-9	1,800		20	200	1
04688	Benzoic acid	65-85-0	2,100		200	600	1
04688	Benzyl alcohol	100-51-6	2,000		200	600	1
04688	4-Bromophenyl-phenylether	101-55-3	1,900		20	200	1
04688	Butylbenzylphthalate	85-68-7	2,000		20	200	1
04688	Di-n-butylphthalate	84-74-2	1,900		20	200	1
04688	Carbazole	86-74-8	1,900		20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	1,900		40	200	1
04688	4-Chloroaniline	106-47-8	1,000		80	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,900		20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,800		20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,800		20	200	1
04688	2-Chloronaphthalene	91-58-7	1,600		20	200	1
04688	2-Chlorophenol	95-57-8	2,000		20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900		40	200	1
04688	Chrysene	218-01-9	2,000		20	200	1
04688	Dibenz(a,h)anthracene	53-70-3	1,700		20	200	1
04688	Dibenzofuran	132-64-9	1,900		20	200	1
04688	1,2-Dichlorobenzene	95-50-1	1,800		20	200	1
04688	1,3-Dichlorobenzene	541-73-1	1,700		20	200	1
04688	1,4-Dichlorobenzene	106-46-7	1,700		20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,600		120	400	1
04688	2,4-Dichlorophenol	120-83-2	1,900		20	200	1
04688	Diethylphthalate	84-66-2	1,900		20	200	1
04688	2,4-Dimethylphenol	105-67-9	1,900		40	200	1
04688	3,5-Dimethylphenol	108-68-9	2,000		40	200	1
04688	Dimethylphthalate	131-11-3	1,900		20	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,800		200	600	1
04688	2,4-Dinitrophenol	51-28-5	3,300		800	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	1,900		40	200	1
04688	2,6-Dinitrotoluene	606-20-2	1,900		20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	2,000		20	200	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000		20	400	1
04688	Fluoranthene	206-44-0	2,000		20	200	1
04688	Fluorene	86-73-7	1,900		20	200	1
04688	Hexachlorobenzene	118-74-1	2,000		20	200	1
04688	Hexachlorobutadiene	87-68-3	1,800		80	200	1
04688	Hexachlorocyclopentadiene	77-47-4	3,200		200	600	1
04688	Hexachloroethane	67-72-1	1,500		20	200	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,700		20	200	1
04688	Isophorone	78-59-1	1,800		20	200	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,900	20	200	1
04688	2-Methylnaphthalene	91-57-6	1,800	20	200	1
04688	2-Methylphenol	95-48-7	2,000	40	200	1
04688	4-Methylphenol	106-44-5	1,900	40	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,900	20	200	1
04688	2-Nitroaniline	88-74-4	2,000	20	200	1
04688	3-Nitroaniline	99-09-2	1,900	40	200	1
04688	4-Nitroaniline	100-01-6	1,600	80	200	1
04688	Nitrobenzene	98-95-3	1,800	20	200	1
04688	2-Nitrophenol	88-75-5	1,900	20	200	1
04688	4-Nitrophenol	100-02-7	1,700	200	600	1
04688	N-Nitrosodimethylamine	62-75-9	1,700	40	200	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800	20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	2,000	20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,900	20	200	1
04688	Pentachlorophenol	87-86-5	2,100	200	600	1
04688	Phenanthrene	85-01-8	1,900	20	200	1
04688	Phenol	108-95-2	1,900	20	200	1
04688	Pyrene	129-00-0	2,000	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,800	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	1,900	40	200	1
04688	2,4,6-Trichlorophenol	88-06-2	2,000	40	200	1
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	37	0.80	2.0	1
10138	Acenaphthylene	208-96-8	38	0.40	2.0	1
10138	Anthracene	120-12-7	37	0.40	2.0	1
10138	Benzo(a)anthracene	56-55-3	40	0.80	2.0	1
10138	Benzo(a)pyrene	50-32-8	39	0.80	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	43	0.80	2.0	1
10138	Benzo(g,h,i)perylene	191-24-2	12	0.80	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	49	0.80	2.0	1
10138	Butylbenzylphthalate	85-68-7	68	7.2	22	1
10138	Di-n-butylphthalate	84-74-2	45	7.2	22	1
10138	Chrysene	218-01-9	37	0.40	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	19	0.80	2.0	1
10138	Diethylphthalate	84-66-2	42	7.2	22	1
10138	Dimethylphthalate	131-11-3	42	7.2	22	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	64	7.2	22	1
10138	Fluoranthene	206-44-0	41	0.80	2.0	1
10138	Fluorene	86-73-7	38	0.80	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	17	0.80	2.0	1
10138	1-Methylnaphthalene	90-12-0	36	0.80	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	33		0.80	2.0	1
10138	Naphthalene	91-20-3	44		0.80	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	43		0.80	2.0	1
10138	Di-n-octylphthalate	117-84-0	98		7.2	22	1
10138	Phenanthrene	85-01-8	37		0.80	2.0	1
10138	Pyrene	129-00-0	50		0.80	2.0	1
	The GC/MS semivolatile internal standard peak areas are outside of QC limits. The background sample was analyzed and internal standard peak areas are again outside of QC limits, indicating a matrix effect.						
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	10		1.4	4.3	1
10401	Dalapon	75-99-0	14		5.3	11	1
10401	2,4-DB	94-82-6	16		0.74	2.0	1
10401	Dicamba	1918-00-9	0.72	J	0.48	1.4	1
10401	Dinoseb	88-85-7	1.7	J	0.96	2.9	1
10401	2,4-DP (Dichlorprop)	120-36-5	14		0.96	2.0	1
10401	MCPA	94-74-6	910		91	300	1
10401	MCPP (Mecoprop)	93-65-2	380		90	300	1
10401	2,4,5-T	93-76-5	0.60		0.098	0.20	1
10401	2,4,5-TP	93-72-1	0.83		0.090	0.20	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.41		0.079	0.20	1
01363	Alpha BHC	319-84-6	0.36		0.041	0.20	1
01363	Beta BHC	319-85-7	0.22		0.072	0.20	1
01363	Gamma BHC - Lindane	58-89-9	0.36		0.041	0.20	1
01363	Chlordane	57-74-9	0.96	U	0.96	4.1	1
01363	p,p-DDD	72-54-8	0.68		0.079	0.41	1
01363	p,p-DDE	72-55-9	1.3		0.079	0.41	1
01363	p,p-DDT	50-29-3	1.1		0.079	0.41	1
01363	Delta BHC	319-86-8	0.45		0.043	0.20	1
01363	Dieldrin	60-57-1	0.60		0.079	0.41	1
01363	Endosulfan I	959-98-8	0.31		0.053	0.20	1
01363	Endosulfan II	33213-65-9	0.80		0.079	0.41	1
01363	Endosulfan Sulfate	1031-07-8	1.0		0.079	0.41	1
01363	Endrin	72-20-8	0.73		0.079	0.41	1
01363	Endrin Aldehyde	7421-93-4	0.51		0.079	0.41	1
01363	Endrin Ketone	53494-70-5	0.80		0.079	0.41	1
01363	Heptachlor	76-44-8	0.30		0.072	0.20	1
01363	Heptachlor Epoxide	1024-57-3	0.39		0.041	0.20	1
01363	Methoxychlor	72-43-5	3.5		0.41	2.0	1
01363	Mirex	2385-85-5	0.079	U	0.079	0.41	1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.9	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.						

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.9	1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.9	1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.9	1
10225	PCB-1016	12674-11-2	23		0.39	2.0	1
10225	PCB-1221	11104-28-2	0.60	U	0.60	2.0	1
10225	PCB-1232	11141-16-5	0.62	U	0.62	2.0	1
10225	PCB-1242	53469-21-9	0.60	U	0.60	2.0	1
10225	PCB-1248	12672-29-6	0.39	U	0.39	2.0	1
10225	PCB-1254	11097-69-1	0.39	U	0.39	2.0	1
10225	PCB-1260	11096-82-5	30		0.39	2.0	1
10225	PCB-1262	37324-23-5	0.39	U	0.39	2.0	1
10225	PCB-1268	11100-14-4	0.39	U	0.39	2.0	1
	The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,300		5.96	23.7	1
07914	Boron	7440-42-8	227		1.05	5.92	1
01650	Calcium	7440-70-2	3,670		7.26	23.7	1
01654	Iron	7439-89-6	21,100		5.58	23.7	1
01656	Lithium	7439-93-2	144		0.26	2.4	1
01657	Magnesium	7439-95-4	6,210		3.01	11.8	1
06958	Manganese	7439-96-5	361		0.0924	0.592	1
10145	Phosphorus	7723-14-0	599		0.663	11.8	1
01662	Potassium	7440-09-7	5,060		21.3	59.2	1
01667	Sodium	7440-23-5	1,280		44.2	118	1
07968	Strontium	7440-24-6	128		0.0734	0.592	1
06969	Tin	7440-31-5	419		1.18	11.8	1
06970	Titanium	7440-32-6	1,580		0.450	1.18	1
10146	Zirconium	7440-67-7	115		0.995	5.92	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.632		0.0697	0.232	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	9.68		0.0697	0.465	2
06126	Barium	7440-39-3	139		0.125	0.465	2
06127	Beryllium	7440-41-7	1.61		0.0186	0.116	2
06128	Cadmium	7440-43-9	1.89		0.0418	0.116	2
06131	Chromium	7440-47-3	37.8		0.139	0.465	2
06132	Cobalt	7440-48-4	74.5		0.0232	0.116	2
06133	Copper	7440-50-8	23.3		0.0766	0.465	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		mg/kg	mg/kg	mg/kg	
06135	Lead	7439-92-1	15.7	0.0121	0.232	2
06138	Molybdenum	7439-98-7	16.6	0.0581	0.116	2
06139	Nickel	7440-02-0	28.8	0.116	0.465	2
06141	Selenium	7782-49-2	2.59	0.0465	0.465	2
06142	Silver	7440-22-4	14.1	0.0139	0.116	2
06145	Thallium	7440-28-0	0.869	0.0348	0.116	2
06148	Vanadium	7440-62-2	63.9	0.0255	0.116	2
06149	Zinc	7440-66-6	97.2	0.650	3.48	2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.204	0.0034	0.119	1
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.7	0.96	1.2	1
	EPA 314.0		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	503	10.8	35.9	1
	SW-846 7199		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	39.3	1.2	6.0	5
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	16.4	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 04:12	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 01:59	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 17:27	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 10:50	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/06/2011 19:18	Lindsey K Lafferty	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 17:35	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:10	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:10	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:10	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:48	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 10:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 18:38	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 21:10	Carrie E Miller	5
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172317
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172318
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900		20	200	1
04688	Acenaphthylene	208-96-8	2,000		20	200	1
04688	Aniline	62-53-3	1,400		200	600	1
04688	Anthracene	120-12-7	1,900		20	200	1
04688	Benzidine	92-87-5	1,500	J	1,400	4,000	1
04688	Benzo(a)anthracene	56-55-3	1,900		20	200	1
04688	Benzo(a)pyrene	50-32-8	1,700		20	200	1
04688	Benzo(b)fluoranthene	205-99-2	1,700		20	200	1
04688	Benzo(g,h,i)perylene	191-24-2	1,700		20	200	1
04688	Benzo(k)fluoranthene	207-08-9	1,600		20	200	1
04688	Benzoic acid	65-85-0	2,100		200	600	1
04688	Benzyl alcohol	100-51-6	1,900		200	600	1
04688	4-Bromophenyl-phenylether	101-55-3	1,900		20	200	1
04688	Butylbenzylphthalate	85-68-7	1,900		20	200	1
04688	Di-n-butylphthalate	84-74-2	1,900		20	200	1
04688	Carbazole	86-74-8	2,000		20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	1,900		40	200	1
04688	4-Chloroaniline	106-47-8	1,200		80	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,800		20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	1,800		20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,700		20	200	1
04688	2-Chloronaphthalene	91-58-7	1,600		20	200	1
04688	2-Chlorophenol	95-57-8	1,900		20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,800		40	200	1
04688	Chrysene	218-01-9	1,900		20	200	1
04688	Dibenz(a,h)anthracene	53-70-3	1,700		20	200	1
04688	Dibenzofuran	132-64-9	1,900		20	200	1
04688	1,2-Dichlorobenzene	95-50-1	1,600		20	200	1
04688	1,3-Dichlorobenzene	541-73-1	1,500		20	200	1
04688	1,4-Dichlorobenzene	106-46-7	1,600		20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	1,600		120	400	1
04688	2,4-Dichlorophenol	120-83-2	2,000		20	200	1
04688	Diethylphthalate	84-66-2	1,900		20	200	1
04688	2,4-Dimethylphenol	105-67-9	1,900		40	200	1
04688	3,5-Dimethylphenol	108-68-9	2,000		40	200	1
04688	Dimethylphthalate	131-11-3	1,900		20	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,800		200	600	1
04688	2,4-Dinitrophenol	51-28-5	3,200		800	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	1,900		40	200	1
04688	2,6-Dinitrotoluene	606-20-2	1,900		20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	2,000		20	200	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000		20	400	1
04688	Fluoranthene	206-44-0	2,000		20	200	1
04688	Fluorene	86-73-7	1,900		20	200	1
04688	Hexachlorobenzene	118-74-1	1,900		20	200	1
04688	Hexachlorobutadiene	87-68-3	1,700		80	200	1
04688	Hexachlorocyclopentadiene	77-47-4	2,700		200	600	1
04688	Hexachloroethane	67-72-1	1,400		20	200	1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,700		20	200	1
04688	Isophorone	78-59-1	1,800		20	200	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172318
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,900	20	200	1
04688	2-Methylnaphthalene	91-57-6	1,800	20	200	1
04688	2-Methylphenol	95-48-7	1,900	40	200	1
04688	4-Methylphenol	106-44-5	1,900	40	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
04688	Naphthalene	91-20-3	1,800	20	200	1
04688	2-Nitroaniline	88-74-4	2,000	20	200	1
04688	3-Nitroaniline	99-09-2	1,900	40	200	1
04688	4-Nitroaniline	100-01-6	1,600	80	200	1
04688	Nitrobenzene	98-95-3	1,800	20	200	1
04688	2-Nitrophenol	88-75-5	1,900	20	200	1
04688	4-Nitrophenol	100-02-7	1,700	200	600	1
04688	N-Nitrosodimethylamine	62-75-9	1,600	40	200	1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800	20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	1,900	20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.					
04688	Di-n-octylphthalate	117-84-0	1,800	20	200	1
04688	Pentachlorophenol	87-86-5	2,300	200	600	1
04688	Phenanthrene	85-01-8	1,900	20	200	1
04688	Phenol	108-95-2	1,900	20	200	1
04688	Pyrene	129-00-0	1,900	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	1,800	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	1,900	40	200	1
04688	2,4,6-Trichlorophenol	88-06-2	2,000	40	200	1
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	36	0.80	2.0	1
10138	Acenaphthylene	208-96-8	37	0.40	2.0	1
10138	Anthracene	120-12-7	37	0.40	2.0	1
10138	Benzo(a)anthracene	56-55-3	39	0.80	2.0	1
10138	Benzo(a)pyrene	50-32-8	38	0.80	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	44	0.80	2.0	1
10138	Benzo(g,h,i)perylene	191-24-2	14	0.80	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	52	0.80	2.0	1
10138	Butylbenzylphthalate	85-68-7	55	7.2	22	1
10138	Di-n-butylphthalate	84-74-2	45	7.2	22	1
10138	Chrysene	218-01-9	36	0.40	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	18	0.80	2.0	1
10138	Diethylphthalate	84-66-2	41	7.2	22	1
10138	Dimethylphthalate	131-11-3	41	7.2	22	1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	64	7.2	22	1
10138	Fluoranthene	206-44-0	38	0.80	2.0	1
10138	Fluorene	86-73-7	38	0.80	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	17	0.80	2.0	1
10138	1-Methylnaphthalene	90-12-0	38	0.80	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172318
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	
10138	2-Methylnaphthalene	91-57-6	35		0.80	2.0	1
10138	Naphthalene	91-20-3	41		0.80	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	40		0.80	2.0	1
10138	Di-n-octylphthalate	117-84-0	97		7.2	22	1
10138	Phenanthrene	85-01-8	37		0.80	2.0	1
10138	Pyrene	129-00-0	41		0.80	2.0	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	
10401	2,4-D	94-75-7	9.9		1.4	4.3	1
10401	Dalapon	75-99-0	26		5.3	11	1
10401	2,4-DB	94-82-6	14		0.74	2.0	1
10401	Dicamba	1918-00-9	0.74	J	0.48	1.4	1
10401	Dinoseb	88-85-7	1.7	J	0.96	2.9	1
10401	2,4-DP (Dichlorprop)	120-36-5	11		0.96	2.0	1
10401	MCPA	94-74-6	1,300		91	300	1
10401	MCPP (Mecoprop)	93-65-2	270	J	90	300	1
10401	2,4,5-T	93-76-5	0.65		0.098	0.20	1
10401	2,4,5-TP	93-72-1	0.92		0.090	0.20	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.47		0.079	0.20	1
01363	Alpha BHC	319-84-6	0.30		0.041	0.20	1
01363	Beta BHC	319-85-7	0.19	J	0.072	0.20	1
01363	Gamma BHC - Lindane	58-89-9	0.35		0.041	0.20	1
01363	Chlordane	57-74-9	0.96	U	0.96	4.1	1
01363	p,p-DDD	72-54-8	0.78		0.079	0.41	1
01363	p,p-DDE	72-55-9	1.6		0.079	0.41	1
01363	p,p-DDT	50-29-3	1.4		0.079	0.41	1
01363	Delta BHC	319-86-8	0.36		0.043	0.20	1
01363	Dieldrin	60-57-1	0.77		0.079	0.41	1
01363	Endosulfan I	959-98-8	0.36		0.053	0.20	1
01363	Endosulfan II	33213-65-9	0.83		0.079	0.41	1
01363	Endosulfan Sulfate	1031-07-8	1.0		0.079	0.41	1
01363	Endrin	72-20-8	0.75		0.079	0.41	1
01363	Endrin Aldehyde	7421-93-4	0.53		0.079	0.41	1
01363	Endrin Ketone	53494-70-5	0.84		0.079	0.41	1
01363	Heptachlor	76-44-8	0.35		0.072	0.20	1
01363	Heptachlor Epoxide	1024-57-3	0.49		0.041	0.20	1
01363	Methoxychlor	72-43-5	5.3		0.41	2.0	1
01363	Mirex	2385-85-5	0.079	U	0.079	0.41	1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.9	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172318
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.9	1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.9	1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.9	1
10225	PCB-1016	12674-11-2	25		0.39	2.0	1
10225	PCB-1221	11104-28-2	0.60	U	0.60	2.0	1
10225	PCB-1232	11141-16-5	0.62	U	0.62	2.0	1
10225	PCB-1242	53469-21-9	0.60	U	0.60	2.0	1
10225	PCB-1248	12672-29-6	0.39	U	0.39	2.0	1
10225	PCB-1254	11097-69-1	0.39	U	0.39	2.0	1
10225	PCB-1260	11096-82-5	31		0.39	2.0	1
10225	PCB-1262	37324-23-5	0.39	U	0.39	2.0	1
10225	PCB-1268	11100-14-4	0.39	U	0.39	2.0	1
	The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,900		5.96	23.7	1
07914	Boron	7440-42-8	222		1.05	5.92	1
01650	Calcium	7440-70-2	3,630		7.26	23.7	1
01654	Iron	7439-89-6	20,300		5.58	23.7	1
01656	Lithium	7439-93-2	139		0.26	2.4	1
01657	Magnesium	7439-95-4	6,070		3.01	11.8	1
06958	Manganese	7439-96-5	356		0.0924	0.592	1
10145	Phosphorus	7723-14-0	597		0.663	11.8	1
01662	Potassium	7440-09-7	4,990		21.3	59.2	1
01667	Sodium	7440-23-5	1,240		44.2	118	1
07968	Strontium	7440-24-6	125		0.0734	0.592	1
06969	Tin	7440-31-5	412		1.18	11.8	1
06970	Titanium	7440-32-6	1,580		0.450	1.18	1
10146	Zirconium	7440-67-7	113		0.995	5.92	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.728		0.0690	0.230	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	10.8		0.0690	0.460	2
06126	Barium	7440-39-3	133		0.124	0.460	2
06127	Beryllium	7440-41-7	1.59		0.0184	0.115	2
06128	Cadmium	7440-43-9	1.79		0.0414	0.115	2
06131	Chromium	7440-47-3	39.5		0.138	0.460	2
06132	Cobalt	7440-48-4	75.9		0.0230	0.115	2
06133	Copper	7440-50-8	23.9		0.0759	0.460	2
06135	Lead	7439-92-1	16.2		0.0120	0.230	2
06138	Molybdenum	7439-98-7	16.6		0.0575	0.115	2

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172318
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06139	Nickel	7440-02-0	28.5	0.115	0.460	2
06141	Selenium	7782-49-2	2.66	0.0460	0.460	2
06142	Silver	7440-22-4	14.0	0.0138	0.115	2
06145	Thallium	7440-28-0	0.865	0.0345	0.115	2
06148	Vanadium	7440-62-2	65.7	0.0253	0.115	2
06149	Zinc	7440-66-6	95.1	0.644	3.45	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.192	0.0032	0.113	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3	n.a.	16.4	0.50	0.50	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 04:37	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 02:31	Gregory J Drahovsky	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 17:55	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 11:05	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/06/2011 19:37	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172318
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 17:38	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:13	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:49	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5DUP Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172319
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,800		5.90	23.5	1
07914	Boron	7440-42-8	4.67	J	1.04	5.86	1
01650	Calcium	7440-70-2	2,870		7.19	23.5	1
01654	Iron	7439-89-6	20,200		5.52	23.5	1
01656	Lithium	7439-93-2	26.7		0.26	2.3	1
01657	Magnesium	7439-95-4	5,710		2.98	11.7	1
06958	Manganese	7439-96-5	300		0.0915	0.586	1
10145	Phosphorus	7723-14-0	485		0.657	11.7	1
01662	Potassium	7440-09-7	3,650		21.1	58.6	1
01667	Sodium	7440-23-5	70.9	J	43.7	117	1
07968	Strontium	7440-24-6	14.1		0.0727	0.586	1
06969	Tin	7440-31-5	1.96	J	1.17	11.7	1
06970	Titanium	7440-32-6	1,290		0.446	1.17	1
10146	Zirconium	7440-67-7	4.43	J	0.985	5.86	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.104	J	0.0704	0.235	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.73		0.0704	0.469	2
06126	Barium	7440-39-3	103		0.127	0.469	2
06127	Beryllium	7440-41-7	0.537		0.0188	0.117	2
06128	Cadmium	7440-43-9	0.215		0.0422	0.117	2
06131	Chromium	7440-47-3	20.2		0.141	0.469	2
06132	Cobalt	7440-48-4	6.22		0.0235	0.117	2
06133	Copper	7440-50-8	9.13		0.0774	0.469	2
06135	Lead	7439-92-1	9.73		0.0122	0.235	2
06138	Molybdenum	7439-98-7	0.467		0.0586	0.117	2
06139	Nickel	7440-02-0	12.8		0.117	0.469	2
06141	Selenium	7782-49-2	0.158	J	0.0469	0.469	2
06142	Silver	7440-22-4	0.0373	J	0.0141	0.117	2
06145	Thallium	7440-28-0	0.311		0.0352	0.117	2
06148	Vanadium	7440-62-2	42.5		0.0258	0.117	2
06149	Zinc	7440-66-6	73.9		0.657	3.52	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0033	U	0.0033	0.116	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.96	J	0.96	1.2	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.8	U	10.8	35.9	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.54	J	0.24	1.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5DUP Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172319
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	541	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.46	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11625	28a Moisture Content by 160.3	n.a.	16.4	0.50	0.50	1
11626	28a Moisture Content by 160.3	n.a.	15.5	0.50	0.50	1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.					

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 17:31	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 10:07	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5DUP Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172319
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED02 SDG#: DE050-02DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 10:07	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 10:07	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 10:07	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:47	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 10:03	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 18:15	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 21:59	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172320
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED15 SDG#: DE050-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	220	U	220	650	1
04688	Benzidine	92-87-5	1,500	U	1,500	4,300	1
04688	Benzoic acid	65-85-0	220	U	220	650	1
04688	Benzyl alcohol	100-51-6	220	U	220	650	1
04688	4-Bromophenyl-phenylether	101-55-3	22	U	22	220	1
04688	Carbazole	86-74-8	22	U	22	220	1
04688	4-Chloro-3-methylphenol	59-50-7	43	U	43	220	1
04688	4-Chloroaniline	106-47-8	87	U	87	220	1
04688	bis(2-Chloroethoxy)methane	111-91-1	22	U	22	220	1
04688	bis(2-Chloroethyl)ether	111-44-4	22	U	22	220	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	22	U	22	220	1
04688	2-Chloronaphthalene	91-58-7	22	U	22	220	1
04688	2-Chlorophenol	95-57-8	22	U	22	220	1
04688	4-Chlorophenyl-phenylether	7005-72-3	43	U	43	220	1
04688	Dibenzofuran	132-64-9	22	U	22	220	1
04688	1,2-Dichlorobenzene	95-50-1	22	U	22	220	1
04688	1,3-Dichlorobenzene	541-73-1	22	U	22	220	1
04688	1,4-Dichlorobenzene	106-46-7	22	U	22	220	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U	130	430	1
04688	2,4-Dichlorophenol	120-83-2	22	U	22	220	1
04688	2,4-Dimethylphenol	105-67-9	43	U	43	220	1
04688	3,5-Dimethylphenol	108-68-9	43	U	43	220	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	220	U	220	650	1
04688	2,4-Dinitrophenol	51-28-5	870	U	870	2,600	1
04688	2,4-Dinitrotoluene	121-14-2	43	U	43	220	1
04688	2,6-Dinitrotoluene	606-20-2	22	U	22	220	1
04688	1,2-Diphenylhydrazine	122-66-7	22	U	22	220	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	67	J	22	430	1
04688	Hexachlorobenzene	118-74-1	22	U	22	220	1
04688	Hexachlorobutadiene	87-68-3	87	U	87	220	1
04688	Hexachlorocyclopentadiene	77-47-4	220	U	220	650	1
04688	Hexachloroethane	67-72-1	22	U	22	220	1
04688	Isophorone	78-59-1	22	U	22	220	1
04688	2-Methylphenol	95-48-7	43	U	43	220	1
04688	4-Methylphenol	106-44-5	43	U	43	220	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	22	U	22	220	1
04688	3-Nitroaniline	99-09-2	43	U	43	220	1
04688	4-Nitroaniline	100-01-6	87	U	87	220	1
04688	Nitrobenzene	98-95-3	22	U	22	220	1
04688	2-Nitrophenol	88-75-5	22	U	22	220	1
04688	4-Nitrophenol	100-02-7	220	U	220	650	1
04688	N-Nitroso-di-n-propylamine	621-64-7	22	U	22	220	1
04688	N-Nitrosodiphenylamine	86-30-6	22	U	22	220	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	220	U	220	650	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172320
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED15 SDG#: DE050-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	22	U	22	220	1
04688	1,2,4-Trichlorobenzene	120-82-1	22	U	22	220	1
04688	2,4,5-Trichlorophenol	95-95-4	43	U	43	220	1
04688	2,4,6-Trichlorophenol	88-06-2	43	U	43	220	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.87	U	0.87	2.2	1
10138	Acenaphthylene	208-96-8	0.47	J	0.43	2.2	1
10138	Anthracene	120-12-7	0.43	U	0.43	2.2	1
10138	Benzo(a)anthracene	56-55-3	0.87	U	0.87	2.2	1
10138	Benzo(a)pyrene	50-32-8	0.87	U	0.87	2.2	1
10138	Benzo(b)fluoranthene	205-99-2	1.8	J	0.87	2.2	1
10138	Benzo(g,h,i)perylene	191-24-2	0.87	U	0.87	2.2	1
10138	Benzo(k)fluoranthene	207-08-9	1.1	J	0.87	2.2	1
10138	Butylbenzylphthalate	85-68-7	7.8	U	7.8	23	1
10138	Di-n-butylphthalate	84-74-2	7.8	U	7.8	23	1
10138	Chrysene	218-01-9	1.9	J	0.43	2.2	1
10138	Dibenz(a,h)anthracene	53-70-3	0.87	U	0.87	2.2	1
10138	Diethylphthalate	84-66-2	7.8	U	7.8	23	1
10138	Dimethylphthalate	131-11-3	7.8	U	7.8	23	1
10138	Fluoranthene	206-44-0	1.9	J	0.87	2.2	1
10138	Fluorene	86-73-7	0.87	U	0.87	2.2	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.87	U	0.87	2.2	1
10138	1-Methylnaphthalene	90-12-0	1.8	J	0.87	2.2	1
10138	2-Methylnaphthalene	91-57-6	2.3		0.87	2.2	1
10138	Naphthalene	91-20-3	4.3		0.87	2.2	1
10138	N-Nitrosodimethylamine	62-75-9	0.87	U	0.87	2.2	1
10138	Di-n-octylphthalate	117-84-0	7.8	U	7.8	23	1
10138	Phenanthrene	85-01-8	2.4		0.87	2.2	1
10138	Pyrene	129-00-0	1.5	J	0.87	2.2	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.6	U	1.6	4.7	1
10401	Dalapon	75-99-0	5.7	U	5.7	12	1
10401	2,4-DB	94-82-6	1.7	U	1.7	2.2	1
10401	Dicamba	1918-00-9	0.52	U	0.52	1.6	1
10401	Dinoseb	88-85-7	1.0	U	1.0	3.1	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0	U	1.0	2.2	1
10401	MCPA	94-74-6	99	U	99	330	1
10401	MCPP (Mecoprop)	93-65-2	98	U	98	330	1
10401	2,4,5-T	93-76-5	0.11	U	0.11	0.22	1
10401	2,4,5-TP	93-72-1	0.098	U	0.098	0.22	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172320
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED15 SDG#: DE050-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	cases, the reporting limits have been raised. The following compound was affected: 2,4-DB.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.086	U	0.086	0.22	1
01363	Alpha BHC	319-84-6	0.044	U	0.044	0.22	1
01363	Beta BHC	319-85-7	0.13	U	0.13	0.22	1
01363	Gamma BHC - Lindane	58-89-9	0.044	U	0.044	0.22	1
01363	Chlordane	57-74-9	1.0	U	1.0	4.4	1
01363	p,p-DDD	72-54-8	0.086	U	0.086	0.44	1
01363	p,p-DDE	72-55-9	0.76	U	0.76	0.76	1
01363	p,p-DDT	50-29-3	0.89	U	0.89	0.89	1
01363	Delta BHC	319-86-8	0.11	J	0.047	0.22	1
01363	Dieldrin	60-57-1	0.086	U	0.086	0.44	1
01363	Endosulfan I	959-98-8	0.22	U	0.22	0.22	1
01363	Endosulfan II	33213-65-9	0.32	U	0.32	0.44	1
01363	Endosulfan Sulfate	1031-07-8	0.086	U	0.086	0.44	1
01363	Endrin	72-20-8	0.086	U	0.086	0.44	1
01363	Endrin Aldehyde	7421-93-4	0.53	U	0.53	0.53	1
01363	Endrin Ketone	53494-70-5	0.086	U	0.086	0.44	1
01363	Heptachlor	76-44-8	0.11	J	0.078	0.22	1
01363	Heptachlor Epoxide	1024-57-3	0.047	U	0.047	0.22	1
01363	Methoxychlor	72-43-5	1.1	U	1.1	2.2	1
01363	Mirex	2385-85-5	0.34	U	0.34	0.44	1
01363	Toxaphene	8001-35-2	2.9	U	2.9	8.6	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.3	U	1.3	4.3	1
10225	Aroclor 5442	12642-23-8	1.3	U	1.3	4.3	1
10225	Aroclor 5460	11126-42-4	1.6	J	1.3	4.3	1
10225	PCB-1016	12674-11-2	0.43	U	0.43	2.2	1
10225	PCB-1221	11104-28-2	0.65	U	0.65	2.2	1
10225	PCB-1232	11141-16-5	0.68	U	0.68	2.2	1
10225	PCB-1242	53469-21-9	0.65	U	0.65	2.2	1
10225	PCB-1248	12672-29-6	0.43	U	0.43	2.2	1
10225	PCB-1254	11097-69-1	2.4		0.43	2.2	1
10225	PCB-1260	11096-82-5	0.71	J	0.43	2.2	1
10225	PCB-1262	37324-23-5	0.43	U	0.43	2.2	1
10225	PCB-1268	11100-14-4	0.43	U	0.43	2.2	1
	The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results						

*=This limit was used in the evaluation of the final result

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172320
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED15 SDG#: DE050-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	between the extractions were similar. The first extraction is being reported.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,200		6.42	25.5	1
07914	Boron	7440-42-8	5.34	J	1.14	6.38	1
01650	Calcium	7440-70-2	5,080		7.83	25.5	1
01654	Iron	7439-89-6	15,300		6.01	25.5	1
01656	Lithium	7439-93-2	21.2		0.28	2.6	1
01657	Magnesium	7439-95-4	3,790		3.24	12.8	1
06958	Manganese	7439-96-5	257		0.0996	0.638	1
10145	Phosphorus	7723-14-0	399		0.715	12.8	1
01662	Potassium	7440-09-7	3,150		23.0	63.8	1
01667	Sodium	7440-23-5	72.3	J	47.6	128	1
07968	Strontium	7440-24-6	23.9		0.0791	0.638	1
06969	Tin	7440-31-5	2.15	J	1.28	12.8	1
06970	Titanium	7440-32-6	883		0.485	1.28	1
10146	Zirconium	7440-67-7	2.32	J	1.07	6.38	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0859	J	0.0774	0.258	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	11.6		0.0774	0.516	2
06126	Barium	7440-39-3	99.4		0.139	0.516	2
06127	Beryllium	7440-41-7	0.497		0.0206	0.129	2
06128	Cadmium	7440-43-9	0.191		0.0464	0.129	2
06131	Chromium	7440-47-3	18.7		0.155	0.516	2
06132	Cobalt	7440-48-4	5.55		0.0258	0.129	2
06133	Copper	7440-50-8	9.12		0.0851	0.516	2
06135	Lead	7439-92-1	13.2		0.0134	0.258	2
06138	Molybdenum	7439-98-7	0.513		0.0645	0.129	2
06139	Nickel	7440-02-0	12.7		0.129	0.516	2
06141	Selenium	7782-49-2	0.188	J	0.0516	0.516	2
06142	Silver	7440-22-4	0.0473	J	0.0155	0.129	2
06145	Thallium	7440-28-0	0.290		0.0387	0.129	2
06148	Vanadium	7440-62-2	36.1		0.0284	0.129	2
06149	Zinc	7440-66-6	73.3		0.722	3.87	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0053	J	0.0036	0.127	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.2	J	1.0	1.3	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.7	U	11.7	39.1	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.26	U	0.26	1.3	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172320
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED15 SDG#: DE050-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	544	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.89	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	23.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 05:27	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 13:51	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 18:23	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 11:19	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/06/2011 19:55	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172320
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED15 SDG#: DE050-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:43	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 11:11	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/04/2011 11:24	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 11:11	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 11:11	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 11:11	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:51	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 10:46	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 19:24	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 22:06	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172321
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED36 SDG#: DE050-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	210	U	210	630	1
04688	Benzidine	92-87-5	1,500	U	1,500	4,200	1
04688	Benzoic acid	65-85-0	210	U	210	630	1
04688	Benzyl alcohol	100-51-6	210	U	210	630	1
04688	4-Bromophenyl-phenylether	101-55-3	21	U	21	210	1
04688	Butylbenzylphthalate	85-68-7	56	J	21	210	1
04688	Carbazole	86-74-8	21	U	21	210	1
04688	4-Chloro-3-methylphenol	59-50-7	42	U	42	210	1
04688	4-Chloroaniline	106-47-8	84	U	84	210	1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U	21	210	1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U	21	210	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U	21	210	1
04688	2-Chloronaphthalene	91-58-7	21	U	21	210	1
04688	2-Chlorophenol	95-57-8	21	U	21	210	1
04688	4-Chlorophenyl-phenylether	7005-72-3	42	U	42	210	1
04688	Dibenzofuran	132-64-9	21	U	21	210	1
04688	1,2-Dichlorobenzene	95-50-1	21	U	21	210	1
04688	1,3-Dichlorobenzene	541-73-1	21	U	21	210	1
04688	1,4-Dichlorobenzene	106-46-7	21	U	21	210	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U	130	420	1
04688	2,4-Dichlorophenol	120-83-2	21	U	21	210	1
04688	2,4-Dimethylphenol	105-67-9	42	U	42	210	1
04688	3,5-Dimethylphenol	108-68-9	42	U	42	210	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U	210	630	1
04688	2,4-Dinitrophenol	51-28-5	840	U	840	2,500	1
04688	2,4-Dinitrotoluene	121-14-2	42	U	42	210	1
04688	2,6-Dinitrotoluene	606-20-2	21	U	21	210	1
04688	1,2-Diphenylhydrazine	122-66-7	21	U	21	210	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	48	J	21	420	1
04688	Hexachlorobenzene	118-74-1	21	U	21	210	1
04688	Hexachlorobutadiene	87-68-3	84	U	84	210	1
04688	Hexachlorocyclopentadiene	77-47-4	210	U	210	630	1
04688	Hexachloroethane	67-72-1	21	U	21	210	1
04688	Isophorone	78-59-1	21	U	21	210	1
04688	2-Methylphenol	95-48-7	42	U	42	210	1
04688	4-Methylphenol	106-44-5	42	U	42	210	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	21	U	21	210	1
04688	3-Nitroaniline	99-09-2	42	U	42	210	1
04688	4-Nitroaniline	100-01-6	84	U	84	210	1
04688	Nitrobenzene	98-95-3	21	U	21	210	1
04688	2-Nitrophenol	88-75-5	21	U	21	210	1
04688	4-Nitrophenol	100-02-7	210	U	210	630	1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U	21	210	1
04688	N-Nitrosodiphenylamine	86-30-6	21	U	21	210	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						

*=This limit was used in the evaluation of the final result

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172321
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED36 SDG#: DE050-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Pentachlorophenol	87-86-5	210	U	210	630	1
04688	Phenol	108-95-2	21	U	21	210	1
04688	1,2,4-Trichlorobenzene	120-82-1	21	U	21	210	1
04688	2,4,5-Trichlorophenol	95-95-4	42	U	42	210	1
04688	2,4,6-Trichlorophenol	88-06-2	42	U	42	210	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.84	U	0.84	2.1	1
10138	Acenaphthylene	208-96-8	0.46	J	0.42	2.1	1
10138	Anthracene	120-12-7	0.42	U	0.42	2.1	1
10138	Benzo(a)anthracene	56-55-3	0.84	U	0.84	2.1	1
10138	Benzo(a)pyrene	50-32-8	1.1	J	0.84	2.1	1
10138	Benzo(b)fluoranthene	205-99-2	2.8		0.84	2.1	1
10138	Benzo(g,h,i)perylene	191-24-2	0.84	U	0.84	2.1	1
10138	Benzo(k)fluoranthene	207-08-9	0.96	J	0.84	2.1	1
10138	Di-n-butylphthalate	84-74-2	7.6	U	7.6	23	1
10138	Chrysene	218-01-9	1.4	J	0.42	2.1	1
10138	Dibenz(a,h)anthracene	53-70-3	0.84	U	0.84	2.1	1
10138	Diethylphthalate	84-66-2	7.6	U	7.6	23	1
10138	Dimethylphthalate	131-11-3	7.6	U	7.6	23	1
10138	Fluoranthene	206-44-0	2.0	J	0.84	2.1	1
10138	Fluorene	86-73-7	0.84	U	0.84	2.1	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.84	U	0.84	2.1	1
10138	1-Methylnaphthalene	90-12-0	0.84	U	0.84	2.1	1
10138	2-Methylnaphthalene	91-57-6	0.84	U	0.84	2.1	1
10138	Naphthalene	91-20-3	1.9	J	0.84	2.1	1
10138	N-Nitrosodimethylamine	62-75-9	0.84	U	0.84	2.1	1
10138	Di-n-octylphthalate	117-84-0	7.6	U	7.6	23	1
10138	Phenanthrene	85-01-8	1.4	J	0.84	2.1	1
10138	Pyrene	129-00-0	1.5	J	0.84	2.1	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.5	U	1.5	4.6	1
10401	Dalapon	75-99-0	5.6	U	5.6	11	1
10401	2,4-DB	94-82-6	2.7	U	2.7	2.7	1
10401	Dicamba	1918-00-9	0.51	U	0.51	1.5	1
10401	Dinoseb	88-85-7	1.0	U	1.0	3.0	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0	U	1.0	2.1	1
10401	MCPA	94-74-6	96	U	96	320	1
10401	MCPP (Mecoprop)	93-65-2	95	U	95	320	1
10401	2,4,5-T	93-76-5	0.10	U	0.10	0.21	1
10401	2,4,5-TP	93-72-1	0.095	U	0.095	0.21	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these

*=This limit was used in the evaluation of the final result

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172321
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED36 SDG#: DE050-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	cases, the reporting limits have been raised. The following compound was affected: 2,4-DB.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.083	U	0.083	0.21	1
01363	Alpha BHC	319-84-6	0.043	U	0.043	0.21	1
01363	Beta BHC	319-85-7	0.076	U	0.076	0.21	1
01363	Gamma BHC - Lindane	58-89-9	0.043	U	0.043	0.21	1
01363	Chlordane	57-74-9	1.0	U	1.0	4.3	1
01363	p,p-DDD	72-54-8	0.083	U	0.083	0.43	1
01363	p,p-DDE	72-55-9	0.39	U	0.39	0.43	1
01363	p,p-DDT	50-29-3	0.44	U	0.44	0.44	1
01363	Delta BHC	319-86-8	0.26		0.046	0.21	1
01363	Dieldrin	60-57-1	0.15	U	0.15	0.43	1
01363	Endosulfan I	959-98-8	0.056	U	0.056	0.21	1
01363	Endosulfan II	33213-65-9	0.083	U	0.083	0.43	1
01363	Endosulfan Sulfate	1031-07-8	0.32	U	0.32	0.43	1
01363	Endrin	72-20-8	0.083	U	0.083	0.43	1
01363	Endrin Aldehyde	7421-93-4	0.13	U	0.13	0.43	1
01363	Endrin Ketone	53494-70-5	0.083	U	0.083	0.43	1
01363	Heptachlor	76-44-8	0.076	U	0.076	0.21	1
01363	Heptachlor Epoxide	1024-57-3	0.13	U	0.13	0.21	1
01363	Methoxychlor	72-43-5	1.0	U	1.0	2.1	1
01363	Mirex	2385-85-5	0.083	U	0.083	0.43	1
01363	Toxaphene	8001-35-2	2.8	U	2.8	8.3	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.3	U	1.3	4.2	1
10225	Aroclor 5442	12642-23-8	1.3	U	1.3	4.2	1
10225	Aroclor 5460	11126-42-4	1.3	U	1.3	4.2	1
10225	PCB-1016	12674-11-2	0.42	U	0.42	2.1	1
10225	PCB-1221	11104-28-2	0.63	U	0.63	2.1	1
10225	PCB-1232	11141-16-5	0.66	U	0.66	2.1	1
10225	PCB-1242	53469-21-9	0.63	U	0.63	2.1	1
10225	PCB-1248	12672-29-6	0.42	U	0.42	2.1	1
10225	PCB-1254	11097-69-1	0.42	U	0.42	2.1	1
10225	PCB-1260	11096-82-5	0.77	J	0.42	2.1	1
10225	PCB-1262	37324-23-5	0.42	U	0.42	2.1	1
10225	PCB-1268	11100-14-4	0.42	U	0.42	2.1	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172321
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED36 SDG#: DE050-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.						
Metals		**SW-846 6010B**	**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,100		6.36	25.3	1
07914	Boron	7440-42-8	9.31		1.13	6.32	1
01650	Calcium	7440-70-2	5,580		7.75	25.3	1
01654	Iron	7439-89-6	31,800		5.95	25.3	1
01656	Lithium	7439-93-2	42.9		0.28	2.5	1
01657	Magnesium	7439-95-4	7,270		3.21	12.6	1
06958	Manganese	7439-96-5	389		0.0986	0.632	1
10145	Phosphorus	7723-14-0	561		0.708	12.6	1
01662	Potassium	7440-09-7	4,840		22.8	63.2	1
01667	Sodium	7440-23-5	93.5	J	47.2	126	1
07968	Strontium	7440-24-6	20.4		0.0784	0.632	1
06969	Tin	7440-31-5	3.30	J	1.26	12.6	1
06970	Titanium	7440-32-6	1,440		0.480	1.26	1
10146	Zirconium	7440-67-7	5.96	J	1.06	6.32	1
		SW-846 6020	**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.203	J	0.0744	0.248	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	15.7		0.0744	0.496	2
06126	Barium	7440-39-3	154		0.134	0.496	2
06127	Beryllium	7440-41-7	1.07		0.0198	0.124	2
06128	Cadmium	7440-43-9	0.285		0.0446	0.124	2
06131	Chromium	7440-47-3	41.7		0.149	0.496	2
06132	Cobalt	7440-48-4	13.1		0.0248	0.124	2
06133	Copper	7440-50-8	22.4		0.0818	0.496	2
06135	Lead	7439-92-1	18.6		0.0129	0.248	2
06138	Molybdenum	7439-98-7	0.783		0.0620	0.124	2
06139	Nickel	7440-02-0	28.0		0.124	0.496	2
06141	Selenium	7782-49-2	0.490	J	0.0496	0.496	2
06142	Silver	7440-22-4	0.161		0.0149	0.124	2
06145	Thallium	7440-28-0	0.585		0.0372	0.124	2
06148	Vanadium	7440-62-2	79.5		0.0273	0.124	2
06149	Zinc	7440-66-6	142		0.694	3.72	2
		SW-846 7471A	**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0109	J	0.0034	0.118	1
Wet Chemistry		**EPA 300.0**	**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6		1.0	1.3	1
		EPA 314.0	**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.4	U	11.4	37.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172321
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED36 SDG#: DE050-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.43	J	0.25	1.3	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	524		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.19		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	20.9		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 05:52	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 14:24	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 18:51	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 11:34	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/06/2011 20:14	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172321
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED36 SDG#: DE050-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:46	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 11:14	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 11:14	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 11:14	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 11:14	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:54	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 11:00	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 20:10	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 22:24	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172322
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED38 SDG#: DE050-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U	190	570	1
04688	Benzyl alcohol	100-51-6	190	U	190	570	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190	1
04688	4-Chloroaniline	106-47-8	76	U	76	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570	1
04688	2,4-Dinitrophenol	51-28-5	760	U	760	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	30	J	19	380	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	38	U	38	190	1
04688	4-Methylphenol	106-44-5	38	U	38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	38	U	38	190	1
04688	4-Nitroaniline	100-01-6	76	U	76	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	570	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	570	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172322
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED38 SDG#: DE050-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9	1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9	1
10138	Anthracene	120-12-7	0.39	J	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	1.2	J	0.76	1.9	1
10138	Benzo(a)pyrene	50-32-8	1.3	J	0.76	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	2.4		0.76	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U	0.76	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	1.3	J	0.76	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21	1
10138	Di-n-butylphthalate	84-74-2	15	J	6.9	21	1
10138	Chrysene	218-01-9	2.8		0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9	1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21	1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21	1
10138	Fluoranthene	206-44-0	6.8		0.76	1.9	1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U	0.76	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9	1
10138	Naphthalene	91-20-3	1.5	J	0.76	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9	1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21	1
10138	Phenanthrene	85-01-8	2.8		0.76	1.9	1
10138	Pyrene	129-00-0	4.6		0.76	1.9	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	3.0	J	1.4	4.1	1
10401	Dalapon	75-99-0	5.0	U	5.0	10	1
10401	2,4-DB	94-82-6	0.71	U	0.71	1.9	1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4	1
10401	Dinoseb	88-85-7	0.92	U	0.92	2.7	1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U	0.92	1.9	1
10401	MCPA	94-74-6	87	U	87	290	1
10401	MCPP (Mecoprop)	93-65-2	270	U	270	290	1
10401	2,4,5-T	93-76-5	0.094	U	0.094	0.19	1
10401	2,4,5-TP	93-72-1	0.086	U	0.086	0.19	1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

MCPP was detected in the method blank. MCPP was not detected in the reextracted blank. The hold time had expired prior to the reextraction so all results are reported from the original extract. The results between

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172322
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED38 SDG#: DE050-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	extractions were slightly dissimilar because of the homogeneity of the sample.						
	Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19	1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19	1
01363	Beta BHC	319-85-7	0.069	U	0.069	0.19	1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19	1
01363	Chlordane	57-74-9	0.92	U	0.92	3.9	1
01363	p,p-DDD	72-54-8	0.076	U	0.076	0.39	1
01363	p,p-DDE	72-55-9	0.27	U	0.27	0.39	1
01363	p,p-DDT	50-29-3	0.28	U	0.28	0.39	1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19	1
01363	Dieldrin	60-57-1	0.076	U	0.076	0.39	1
01363	Endosulfan I	959-98-8	0.058	U	0.058	0.19	1
01363	Endosulfan II	33213-65-9	0.076	U	0.076	0.39	1
01363	Endosulfan Sulfate	1031-07-8	0.076	U	0.076	0.39	1
01363	Endrin	72-20-8	0.076	U	0.076	0.39	1
01363	Endrin Aldehyde	7421-93-4	0.076	U	0.076	0.39	1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39	1
01363	Heptachlor	76-44-8	0.069	U	0.069	0.19	1
01363	Heptachlor Epoxide	1024-57-3	0.039	U	0.039	0.19	1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9	1
01363	Mirex	2385-85-5	0.076	U	0.076	0.39	1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8	1
10225	Aroclor 5460	11126-42-4	2.8	J	1.1	3.8	1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9	1
10225	PCB-1221	11104-28-2	0.57	U	0.57	1.9	1
10225	PCB-1232	11141-16-5	0.59	U	0.59	1.9	1
10225	PCB-1242	53469-21-9	0.57	U	0.57	1.9	1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9	1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9	1
10225	PCB-1260	11096-82-5	1.0	J	0.38	1.9	1

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172322
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED38 SDG#: DE050-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9	1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9	1
	The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	12,600		5.76	22.9	1
07914	Boron	7440-42-8	4.94	J	1.02	5.72	1
01650	Calcium	7440-70-2	2,530		7.01	22.9	1
01654	Iron	7439-89-6	17,600		5.39	22.9	1
01656	Lithium	7439-93-2	19.7		0.25	2.3	1
01657	Magnesium	7439-95-4	4,300		2.91	11.4	1
06958	Manganese	7439-96-5	267		0.0892	0.572	1
10145	Phosphorus	7723-14-0	362		0.641	11.4	1
01662	Potassium	7440-09-7	3,270		20.6	57.2	1
01667	Sodium	7440-23-5	61.9	J	42.7	114	1
07968	Strontium	7440-24-6	14.3		0.0709	0.572	1
06969	Tin	7440-31-5	2.03	J	1.14	11.4	1
06970	Titanium	7440-32-6	1,030		0.435	1.14	1
10146	Zirconium	7440-67-7	2.81	J	0.961	5.72	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0951	J	0.0673	0.224	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	5.11		0.0673	0.449	2
06126	Barium	7440-39-3	106		0.121	0.449	2
06127	Beryllium	7440-41-7	0.555		0.0179	0.112	2
06128	Cadmium	7440-43-9	0.248		0.0404	0.112	2
06131	Chromium	7440-47-3	24.0		0.135	0.449	2
06132	Cobalt	7440-48-4	6.49		0.0224	0.112	2
06133	Copper	7440-50-8	9.33		0.0740	0.449	2
06135	Lead	7439-92-1	12.0		0.0117	0.224	2
06138	Molybdenum	7439-98-7	0.560		0.0561	0.112	2
06139	Nickel	7440-02-0	13.7		0.112	0.449	2
06141	Selenium	7782-49-2	0.161	J	0.0449	0.449	2
06142	Silver	7440-22-4	0.0475	J	0.0135	0.112	2
06145	Thallium	7440-28-0	0.267		0.0337	0.112	2
06148	Vanadium	7440-62-2	44.4		0.0247	0.112	2
06149	Zinc	7440-66-6	76.5		0.628	3.37	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0059	J	0.0033	0.114	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3		0.92	1.1	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172322
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED38 SDG#: DE050-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 314.0**		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.3	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23	U	0.23	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	527		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.94		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	12.6		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 06:18	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 14:56	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 19:19	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 11:49	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/12/2011 02:47	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172322
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED38 SDG#: DE050-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:50	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 11:17	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 11:17	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 11:17	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 11:17	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:55	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 11:14	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 20:33	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 22:31	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172322
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED38 SDG#: DE050-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172323
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED39 SDG#: DE050-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	220	U	220	660	1
04688	Benzidine	92-87-5	1,500	U	1,500	4,400	1
04688	Benzoic acid	65-85-0	220	U	220	660	1
04688	Benzyl alcohol	100-51-6	220	U	220	660	1
04688	4-Bromophenyl-phenylether	101-55-3	22	U	22	220	1
04688	Carbazole	86-74-8	22	U	22	220	1
04688	4-Chloro-3-methylphenol	59-50-7	44	U	44	220	1
04688	4-Chloroaniline	106-47-8	88	U	88	220	1
04688	bis(2-Chloroethoxy)methane	111-91-1	22	U	22	220	1
04688	bis(2-Chloroethyl)ether	111-44-4	22	U	22	220	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	22	U	22	220	1
04688	2-Chloronaphthalene	91-58-7	22	U	22	220	1
04688	2-Chlorophenol	95-57-8	22	U	22	220	1
04688	4-Chlorophenyl-phenylether	7005-72-3	44	U	44	220	1
04688	Dibenzofuran	132-64-9	22	U	22	220	1
04688	1,2-Dichlorobenzene	95-50-1	22	U	22	220	1
04688	1,3-Dichlorobenzene	541-73-1	22	U	22	220	1
04688	1,4-Dichlorobenzene	106-46-7	22	U	22	220	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U	130	440	1
04688	2,4-Dichlorophenol	120-83-2	22	U	22	220	1
04688	2,4-Dimethylphenol	105-67-9	44	U	44	220	1
04688	3,5-Dimethylphenol	108-68-9	44	U	44	220	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	220	U	220	660	1
04688	2,4-Dinitrophenol	51-28-5	880	U	880	2,700	1
04688	2,4-Dinitrotoluene	121-14-2	44	U	44	220	1
04688	2,6-Dinitrotoluene	606-20-2	22	U	22	220	1
04688	1,2-Diphenylhydrazine	122-66-7	22	U	22	220	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	33	J	22	440	1
04688	Hexachlorobenzene	118-74-1	22	U	22	220	1
04688	Hexachlorobutadiene	87-68-3	88	U	88	220	1
04688	Hexachlorocyclopentadiene	77-47-4	220	U	220	660	1
04688	Hexachloroethane	67-72-1	22	U	22	220	1
04688	Isophorone	78-59-1	22	U	22	220	1
04688	2-Methylphenol	95-48-7	44	U	44	220	1
04688	4-Methylphenol	106-44-5	44	U	44	220	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	22	U	22	220	1
04688	3-Nitroaniline	99-09-2	44	U	44	220	1
04688	4-Nitroaniline	100-01-6	88	U	88	220	1
04688	Nitrobenzene	98-95-3	22	U	22	220	1
04688	2-Nitrophenol	88-75-5	22	U	22	220	1
04688	4-Nitrophenol	100-02-7	220	U	220	660	1
04688	N-Nitroso-di-n-propylamine	621-64-7	22	U	22	220	1
04688	N-Nitrosodiphenylamine	86-30-6	22	U	22	220	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	220	U	220	660	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172323
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED39 SDG#: DE050-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	22	U	22	220	1
04688	1,2,4-Trichlorobenzene	120-82-1	22	U	22	220	1
04688	2,4,5-Trichlorophenol	95-95-4	44	U	44	220	1
04688	2,4,6-Trichlorophenol	88-06-2	44	U	44	220	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.88	U	0.88	2.2	1
10138	Acenaphthylene	208-96-8	0.44	U	0.44	2.2	1
10138	Anthracene	120-12-7	0.44	U	0.44	2.2	1
10138	Benzo(a)anthracene	56-55-3	0.88	U	0.88	2.2	1
10138	Benzo(a)pyrene	50-32-8	1.1	J	0.88	2.2	1
10138	Benzo(b)fluoranthene	205-99-2	2.7		0.88	2.2	1
10138	Benzo(g,h,i)perylene	191-24-2	0.88	U	0.88	2.2	1
10138	Benzo(k)fluoranthene	207-08-9	0.91	J	0.88	2.2	1
10138	Butylbenzylphthalate	85-68-7	17	J	8.0	24	1
10138	Di-n-butylphthalate	84-74-2	8.0	U	8.0	24	1
10138	Chrysene	218-01-9	2.2	J	0.44	2.2	1
10138	Dibenz(a,h)anthracene	53-70-3	0.88	U	0.88	2.2	1
10138	Diethylphthalate	84-66-2	8.0	U	8.0	24	1
10138	Dimethylphthalate	131-11-3	8.0	U	8.0	24	1
10138	Fluoranthene	206-44-0	2.0	J	0.88	2.2	1
10138	Fluorene	86-73-7	2.0	J	0.88	2.2	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.88	U	0.88	2.2	1
10138	1-Methylnaphthalene	90-12-0	0.88	U	0.88	2.2	1
10138	2-Methylnaphthalene	91-57-6	0.88	U	0.88	2.2	1
10138	Naphthalene	91-20-3	1.7	J	0.88	2.2	1
10138	N-Nitrosodimethylamine	62-75-9	0.88	U	0.88	2.2	1
10138	Di-n-octylphthalate	117-84-0	8.0	U	8.0	24	1
10138	Phenanthrene	85-01-8	1.6	J	0.88	2.2	1
10138	Pyrene	129-00-0	1.4	J	0.88	2.2	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.6	U	1.6	4.8	1
10401	Dalapon	75-99-0	5.8	U	5.8	12	1
10401	2,4-DB	94-82-6	5.6		0.82	2.3	1
10401	Dicamba	1918-00-9	0.53	U	0.53	1.6	1
10401	Dinoseb	88-85-7	1.1	U	1.1	3.2	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.1	U	1.1	2.3	1
10401	MCPA	94-74-6	460		100	330	1
10401	MCPP (Mecoprop)	93-65-2	99	U	99	330	1
10401	2,4,5-T	93-76-5	0.11	U	0.11	0.23	1
10401	2,4,5-TP	93-72-1	0.099	U	0.099	0.23	1
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.13	J	0.088	0.22	1
01363	Alpha BHC	319-84-6	0.045	U	0.045	0.22	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172323
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED39 SDG#: DE050-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Beta BHC	319-85-7	0.080	U	0.080	0.22	1
01363	Gamma BHC - Lindane	58-89-9	0.16	J	0.045	0.22	1
01363	Chlordane	57-74-9	1.1	U	1.1	4.5	1
01363	p,p-DDD	72-54-8	0.088	U	0.088	0.45	1
01363	p,p-DDE	72-55-9	0.85	U	0.85	0.85	1
01363	p,p-DDT	50-29-3	0.78	U	0.78	0.78	1
01363	Delta BHC	319-86-8	2.4	U	2.4	2.4	5
01363	Dieldrin	60-57-1	0.20	U	0.20	0.45	1
01363	Endosulfan I	959-98-8	0.15	U	0.15	0.22	1
01363	Endosulfan II	33213-65-9	0.088	U	0.088	0.45	1
01363	Endosulfan Sulfate	1031-07-8	0.088	U	0.088	0.45	1
01363	Endrin	72-20-8	0.088	U	0.088	0.45	1
01363	Endrin Aldehyde	7421-93-4	0.65	U	0.65	0.65	1
01363	Endrin Ketone	53494-70-5	0.088	U	0.088	0.45	1
01363	Heptachlor	76-44-8	0.32		0.080	0.22	1
01363	Heptachlor Epoxide	1024-57-3	0.065	U	0.065	0.22	1
01363	Methoxychlor	72-43-5	8.6	U	8.6	8.6	1
01363	Mirex	2385-85-5	1.7	U	1.7	1.7	1
01363	Toxaphene	8001-35-2	2.9	U	2.9	8.8	1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
The TCX surrogate is outside the QC limits in the method blank and LCS. The LCS recoveries for alpha-BHC and gamma-BHC are also outside the QC limits. A reextraction was performed outside the sample hold time. The QC recoveries from the reextraction are within the limits. Similar results were obtained in both extractions. The original in hold data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.
Due to the nature of the sample extract matrix and interference from PCBs, a dilution was used for the analysis.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.3	U	1.3	4.4	1
10225	Aroclor 5442	12642-23-8	1.3	U	1.3	4.4	1
10225	Aroclor 5460	11126-42-4	2.1	J	1.3	4.4	1
10225	PCB-1016	12674-11-2	0.44	U	0.44	2.3	1
10225	PCB-1221	11104-28-2	0.66	U	0.66	2.3	1
10225	PCB-1232	11141-16-5	0.69	U	0.69	2.3	1
10225	PCB-1242	53469-21-9	0.66	U	0.66	2.3	1
10225	PCB-1248	12672-29-6	0.44	U	0.44	2.3	1
10225	PCB-1254	11097-69-1	4.2		0.44	2.3	1
10225	PCB-1260	11096-82-5	1.3	J	0.44	2.3	1
10225	PCB-1262	37324-23-5	0.44	U	0.44	2.3	1
10225	PCB-1268	11100-14-4	0.44	U	0.44	2.3	1

The LCS associated with this sample had a high recovery for aroclor 1260 at 167% (65-137). The sample was reextracted beyond the sample hold time. The results between the extractions were similar. The first extraction is being reported.

*=This limit was used in the evaluation of the final result

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172323
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED39 SDG#: DE050-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	9,390		6.54	26.0	1
07914	Boron	7440-42-8	3.97	J	1.16	6.50	1
01650	Calcium	7440-70-2	2,200		7.97	26.0	1
01654	Iron	7439-89-6	15,400		6.12	26.0	1
01656	Lithium	7439-93-2	21.5		0.29	2.6	1
01657	Magnesium	7439-95-4	3,420		3.30	13.0	1
06958	Manganese	7439-96-5	230		0.101	0.650	1
10145	Phosphorus	7723-14-0	357		0.728	13.0	1
01662	Potassium	7440-09-7	3,100		23.4	65.0	1
01667	Sodium	7440-23-5	59.6	J	48.5	130	1
07968	Strontium	7440-24-6	11.1		0.0806	0.650	1
06969	Tin	7440-31-5	2.30	J	1.30	13.0	1
06970	Titanium	7440-32-6	821		0.494	1.30	1
10146	Zirconium	7440-67-7	2.19	J	1.09	6.50	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0773	U	0.0773	0.258	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.51		0.0773	0.515	2
06126	Barium	7440-39-3	106		0.139	0.515	2
06127	Beryllium	7440-41-7	0.513		0.0206	0.129	2
06128	Cadmium	7440-43-9	0.125	J	0.0464	0.129	2
06131	Chromium	7440-47-3	18.3		0.155	0.515	2
06132	Cobalt	7440-48-4	6.80		0.0258	0.129	2
06133	Copper	7440-50-8	7.54		0.0850	0.515	2
06135	Lead	7439-92-1	10.3		0.0134	0.258	2
06138	Molybdenum	7439-98-7	0.364		0.0644	0.129	2
06139	Nickel	7440-02-0	11.6		0.129	0.515	2
06141	Selenium	7782-49-2	0.136	J	0.0515	0.515	2
06142	Silver	7440-22-4	0.0238	J	0.0155	0.129	2
06145	Thallium	7440-28-0	0.268		0.0386	0.129	2
06148	Vanadium	7440-62-2	37.0		0.0283	0.129	2
06149	Zinc	7440-66-6	75.6		0.721	3.86	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0036	U	0.0036	0.125	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3	J	1.1	1.3	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.9	U	11.9	39.8	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.29	J	0.27	1.3	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172323
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED39 SDG#: DE050-06*

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	534	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.02	0.0100	0.0100	1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3		n.a.	24.6	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLJ026	01/18/2011 06:43	Ryan P Byrne	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10363SLM026	01/12/2011 15:28	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10363SLM026	12/30/2010 07:00	Kerrie A Freeburn	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLJ026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040013A	01/07/2011 19:46	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 12:03	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103640030A	01/26/2011 12:18	Jamie L Brillhart	5
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640028A	01/12/2011 03:05	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103640030A	12/31/2010 07:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640028A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040013A	01/04/2011 23:30	Roman Kuropatkin	1
01643	Aluminum	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
07914	Boron	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
01650	Calcium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172323
LLI Group # 1226717
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

Submitted: 12/22/2010 10:55
Reported: 02/04/2011 16:25

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED39 SDG#: DE050-06*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
01656	Lithium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
01657	Magnesium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
06958	Manganese	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
01662	Potassium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
01667	Sodium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
07968	Strontium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
06969	Tin	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
06970	Titanium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
10146	Zirconium	SW-846 6010B	1	103575708005	12/30/2010 18:53	John P Hook	1
06124	Antimony	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103571026002D	01/03/2011 11:20	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06133	Copper	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103571026002C	01/03/2011 11:20	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103571026002B	01/03/2011 11:20	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103571026002A	01/03/2011 11:20	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103575711006	12/28/2010 17:56	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103575708005	12/27/2010 09:22	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103571026002	12/27/2010 10:25	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103575711006	12/27/2010 11:40	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 11:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 22:28	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11019243202A	01/23/2011 22:49	Carrie E Miller	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	3	11019243202A	01/19/2011 11:20	Michelle L Lalli	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226717
Reported: 02/04/11 at 04:25 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10363SLJ026	Sample number(s): 6172315-6172318,6172320-6172323									
Acenaphthene	17	U	17.	170	ug/kg	96		76-111		
Acenaphthylene	17	U	17.	170	ug/kg	99		75-122		
Aniline	170 U		170.	500	ug/kg	79		10-107		
Anthracene	17	U	17.	170	ug/kg	99		76-112		
Benzidine	1,200 U		1,200.	3,300	ug/kg	63		15-121		
Benzo(a)anthracene	17	U	17.	170	ug/kg	100		73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	86		69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	91		61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	82		65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	85		67-125		
Benzoic acid	170 U		170.	500	ug/kg	108		10-154		
Benzyl alcohol	170 U		170.	500	ug/kg	101		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	97		79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	102		75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	99		79-112		
Carbazole	17	U	17.	170	ug/kg	101		77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	99		74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	58		10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	94		70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	94		70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	93		68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	89		67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	101		72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	95		79-110		
Chrysene	17	U	17.	170	ug/kg	100		76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	86		70-128		
Dibenzofuran	17	U	17.	170	ug/kg	97		79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	91		79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	88		70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	89		74-106		
3,3'-Dichlorobenzidine	100 U		100.	330	ug/kg	77		38-105		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	98		75-111		
Diethylphthalate	17	U	17.	170	ug/kg	95		76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	100		72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	104		70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	96		77-109		
4,6-Dinitro-2-methylphenol	170 U		170.	500	ug/kg	93		53-110		
2,4-Dinitrophenol	670 U		670.	2,000	ug/kg	85		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	99		73-115		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226717
Reported: 02/04/11 at 04:25 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	96		79-115		
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	100		77-111		
bis(2-Ethylhexyl)phthalate	17	U	17.	330	ug/kg	97		75-117		
Fluoranthene	17	U	17.	170	ug/kg	104		78-116		
Fluorene	17	U	17.	170	ug/kg	97		75-116		
Hexachlorobenzene	17	U	17.	170	ug/kg	98		78-116		
Hexachlorobutadiene	67	U	67.	170	ug/kg	91		70-112		
Hexachlorocyclopentadiene	170	U	170.	500	ug/kg	86		46-115		
Hexachloroethane	17	U	17.	170	ug/kg	87		68-105		
Indeno(1,2,3-cd)pyrene	17	U	17.	170	ug/kg	84		64-119		
Isophorone	17	U	17.	170	ug/kg	95		69-110		
1-Methylnaphthalene	17	U	17.	170	ug/kg	99		74-105		
2-Methylnaphthalene	17	U	17.	170	ug/kg	91		76-105		
2-Methylphenol	33	U	33.	170	ug/kg	98		66-110		
4-Methylphenol	33	U	33.	170	ug/kg	96		66-117		
Naphthalene	17	U	17.	170	ug/kg	94		73-106		
2-Nitroaniline	17	U	17.	170	ug/kg	101		78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	99		62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	77		49-98		
Nitrobenzene	17	U	17.	170	ug/kg	95		71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	95		81-114		
4-Nitrophenol	170	U	170.	500	ug/kg	86		56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	94		63-107		
N-Nitrosodimethylamine	33	U	33.	170	ug/kg	79		60-106		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	101		67-141		
Di-n-octylphthalate	17	U	17.	170	ug/kg	90		68-130		
Pentachlorophenol	170	U	170.	500	ug/kg	111*		35-106		
Phenanthrene	17	U	17.	170	ug/kg	99		77-113		
Phenol	17	U	17.	170	ug/kg	99		58-112		
Pyrene	17	U	17.	170	ug/kg	103		75-115		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	93		73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	97		76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	97		78-111		
Batch number: 10363SLM026	Sample number(s): 6172315-6172318,6172320-6172323									
Acenaphthene	0.67	U	0.67	1.7	ug/kg	83		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	86		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	86		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	87		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	85		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	98		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	88		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	87		66-137		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	95		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	93		84-132		
Chrysene	0.33	U	0.33	1.7	ug/kg	87		79-120		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	87		62-142		
Diethylphthalate	6.0	U	6.0	18	ug/kg	94		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	95		70-130		
Bis(2-Ethylhexyl)phthalate	6.0	U	6.0	18	ug/kg	95		67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	84		78-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	90		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	87		62-141		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	87		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	82		62-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226717
Reported: 02/04/11 at 04:25 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Naphthalene	0.67	U	0.67	1.7	ug/kg	86		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	92		39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	90		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	87		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	87		56-121		
Batch number: 110040013A	Sample number(s): 6172315-6172318,6172320-6172323									
2,4-D	1.2	U	1.2	3.6	ug/kg	108		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	40		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	95		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	94		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	8*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	111		60-141		
MCPA	76	U	76.	250	ug/kg	94		34-113		
MCPP (Mecoprop)	500		75.	250	ug/kg	88		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	105		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	90		48-138		
Batch number: 103640028A	Sample number(s): 6172315-6172318,6172320-6172323									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	82	68*	75-125	18	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	117		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	167*		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 103640030A	Sample number(s): 6172315-6172318,6172320-6172323									
Aldrin	0.066	U	0.066	0.17	ug/kg	64		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	33*		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	66		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	42*		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	88		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	118		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	83		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	72		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	79		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	64		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	105		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	114		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	80		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	79		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	106		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	48		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	97		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	83		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					
Batch number: 103571026002A	Sample number(s): 6172315-6172323									
Antimony	0.0577	U	0.0577	0.192	mg/kg	63		11-208		
Arsenic	0.0577	U	0.0577	0.385	mg/kg	97		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226717
Reported: 02/04/11 at 04:25 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Beryllium	0.0154	U	0.0154	0.0962	mg/kg	98		82-118		
Cadmium	0.0346	U	0.0346	0.0962	mg/kg	99		82-118		
Chromium	0.115	U	0.115	0.385	mg/kg	103		80-120		
Cobalt	0.0192	U	0.0192	0.0962	mg/kg	99		82-118		
Copper	0.203	J	0.0635	0.385	mg/kg	99		80-120		
Lead	0.0114	J	0.0100	0.192	mg/kg	98		80-120		
Nickel	0.121	J	0.0962	0.385	mg/kg	105		80-120		
Silver	0.0115	U	0.0115	0.0962	mg/kg	100		66-134		
Thallium	0.0288	U	0.0288	0.0962	mg/kg	101		81-119		
Vanadium	0.0212	U	0.0212	0.0962	mg/kg	94		90-110		
Zinc	0.601	J	0.538	2.88	mg/kg	101		78-122		
Batch number: 103571026002B	Sample number(s): 6172315-6172323									
Selenium	0.0385	U	0.0385	0.385	mg/kg	97		79-122		
Batch number: 103571026002C	Sample number(s): 6172315-6172323									
Molybdenum	0.0481	U	0.0481	0.0962	mg/kg	103		78-122		
Batch number: 103571026002D	Sample number(s): 6172315-6172323									
Barium	0.104	U	0.104	0.385	mg/kg	106		79-121		
Batch number: 103575708005	Sample number(s): 6172315-6172323									
Aluminum	16.5	J	4.98	19.8	mg/kg	95		61-110		
Boron	0.881	U	0.881	4.95	mg/kg	90		78-110		
Calcium	13.9	J	6.07	19.8	mg/kg	98		88-110		
Iron	6.65	J	4.66	19.8	mg/kg	86		61-110		
Lithium	0.22	U	0.22	2.0	mg/kg	100		80-120		
Magnesium	2.51	U	2.51	9.90	mg/kg	97		82-110		
Manganese	0.0772	U	0.0772	0.495	mg/kg	98		81-119		
Phosphorus	1.41	J	0.554	9.90	mg/kg	100		80-120		
Potassium	17.8	U	17.8	49.5	mg/kg	98		78-110		
Sodium	36.9	U	36.9	99.0	mg/kg	98		87-110		
Strontium	0.0782	J	0.0614	0.495	mg/kg	98		79-121		
Tin	1.13	J	0.990	9.90	mg/kg	96		90-114		
Titanium	0.376	U	0.376	0.990	mg/kg	90		80-120		
Zirconium	0.832	U	0.832	4.95	mg/kg	100		80-120		
Batch number: 103575711006	Sample number(s): 6172315-6172323									
Mercury	0.0027	U	0.0027	0.0934	mg/kg	110		88-123		
Batch number: 11013013201A	Sample number(s): 6172315-6172317,6172319-6172323									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	101		90-110		
Batch number: 11013013203A	Sample number(s): 6172315-6172317,6172319-6172323									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	87		85-115		
Batch number: 11019243202A	Sample number(s): 6172315-6172317,6172319-6172323									
3a Cr VI by EPA 7199	0.20	U	0.20	1.0	mg/kg	99		80-120		
Batch number: 10361039402B	Sample number(s): 6172315-6172316,6172319-6172323									
22a pH by 9045C						100		95-105		
Batch number: 10361182102B	Sample number(s): 6172315-6172316,6172319-6172323									
Oxidation Reduction Potential						100		98-102		
Batch number: 11007162401A	Sample number(s): 6172315-6172323									
28a Moisture Content by 160.3						100		80-120		
28a Moisture Content by 160.3						100		80-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226717
Reported: 02/04/11 at 04:25 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
28a Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10363SLJ026	Sample number(s): 6172315-6172318,6172320-6172323 UNSPK: 6172316								
Acenaphthene	97	94	75-115	4	30				
Acenaphthylene	100	100	49-126	1	30				
Aniline	75	69	14-114	9	30				
Anthracene	96	96	75-115	0	30				
Benzidine	25*	15*	35-141	53*	30				
Benzo(a)anthracene	97	96	65-122	0	30				
Benzo(a)pyrene	86	84	57-126	2	30				
Benzo(b)fluoranthene	82	87	59-125	6	30				
Benzo(g,h,i)perylene	85	86	59-127	1	30				
Benzo(k)fluoranthene	89	80	56-132	11	30				
Benzoic acid	104	104	10-173	1	30				
Benzyl alcohol	100	96	55-123	4	30				
4-Bromophenyl-phenylether	97	96	67-129	2	30				
Butylbenzylphthalate	101	97	73-134	4	30				
Di-n-butylphthalate	96	96	67-123	1	30				
Carbazole	97	99	64-120	2	30				
4-Chloro-3-methylphenol	95	96	53-130	1	30				
4-Chloroaniline	50	58	23-95	14	30				
bis(2-Chloroethoxy)methane	93	91	54-117	3	30				
bis(2-Chloroethyl)ether	91	89	60-116	3	30				
bis(2-Chloroisopropyl)ether	88	85	55-142	3	30				
2-Chloronaphthalene	81	81	50-141	1	30				
2-Chlorophenol	98	97	73-121	2	30				
4-Chlorophenyl-phenylether	96	92	64-119	4	30				
Chrysene	99	95	62-128	4	30				
Dibenz(a,h)anthracene	85	86	65-125	1	30				
Dibenzofuran	96	96	71-112	0	30				
1,2-Dichlorobenzene	88	81	66-108	8	30				
1,3-Dichlorobenzene	84	78	63-109	8	30				
1,4-Dichlorobenzene	84	79	53-113	7	30				
3,3'-Dichlorobenzidine	82	79	25-123	4	30				
2,4-Dichlorophenol	97	99	78-117	2	30				
Diethylphthalate	94	93	66-118	1	30				
2,4-Dimethylphenol	97	97	56-130	0	30				
3,5-Dimethylphenol	102	101	70-130	1	30				
Dimethylphthalate	96	95	64-118	1	30				
4,6-Dinitro-2-methylphenol	90	90	10-148	0	30				
2,4-Dinitrophenol	83	81	20-143	3	30				
2,4-Dinitrotoluene	96	94	57-114	2	30				
2,6-Dinitrotoluene	96	95	69-123	2	30				
1,2-Diphenylhydrazine	100	98	71-129	2	30				
bis(2-Ethylhexyl)phthalate	96	97	63-122	1	30				
Fluoranthene	99	100	59-122	2	30				
Fluorene	95	95	60-125	0	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226717
Reported: 02/04/11 at 04:25 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Hexachlorobenzene	98	95	61-111	4	30				
Hexachlorobutadiene	89	83	62-120	7	30				
Hexachlorocyclopentadiene	79	69	10-153	14	30				
Hexachloroethane	77	72	57-109	7	30				
Indeno(1,2,3-cd)pyrene	85	85	61-126	1	30				
Isophorone	93	92	51-118	0	30				
1-Methylnaphthalene	95	94	73-112	2	30				
2-Methylnaphthalene	89	89	76-114	0	30				
2-Methylphenol	98	96	47-142	2	30				
4-Methylphenol	97	94	55-126	4	30				
Naphthalene	93	91	72-116	2	30				
2-Nitroaniline	98	99	67-125	1	30				
3-Nitroaniline	94	93	59-122	1	30				
4-Nitroaniline	79	80	52-112	2	30				
Nitrobenzene	92	90	51-114	2	30				
2-Nitrophenol	94	95	74-115	2	30				
4-Nitrophenol	88	83	39-133	6	30				
N-Nitroso-di-n-propylamine	91	90	60-116	1	30				
N-Nitrosodimethylamine	87	79	47-116	9	30				
N-Nitrosodiphenylamine	98	97	86-145	1	30				
Di-n-octylphthalate	94	91	56-126	3	30				
Pentachlorophenol	108	114	17-149	5	30				
Phenanthrene	95	95	65-125	1	30				
Phenol	98	96	58-126	2	30				
Pyrene	100	97	51-151	3	30				
1,2,4-Trichlorobenzene	90	89	72-115	1	30				
2,4,5-Trichlorophenol	97	97	34-139	1	30				
2,4,6-Trichlorophenol	100	98	49-140	2	30				
Batch number: 10363SLM026	Sample number(s): 6172315-6172318,6172320-6172323 UNSPK: 6172316								
Acenaphthene	92	91	63-105	2	30				
Acenaphthylene	95	93	55-126	2	30				
Anthracene	93	93	46-136	0	30				
Benzo(a)anthracene	100	97	39-144	3	30				
Benzo(a)pyrene	97	95	34-156	2	30				
Benzo(b)fluoranthene	104	108	43-155	4	30				
Benzo(g,h,i)perylene	30*	34	33-141	13	30				
Benzo(k)fluoranthene	122	130	42-144	6	30				
Butylbenzylphthalate	171*	138	73-140	21	30				
Di-n-butylphthalate	112	112	78-160	0	30				
Chrysene	91	89	29-156	3	30				
Dibenz(a,h)anthracene	47	46	41-130	2	30				
Diethylphthalate	105	102	87-131	3	30				
Dimethylphthalate	105	102	74-118	3	30				
Bis(2-Ethylhexyl)phthalate	125	125	39-167	0	30				
Fluoranthene	100	94	26-166	6	30				
Fluorene	95	94	45-121	1	30				
Indeno(1,2,3-cd)pyrene	44	42	21-143	3	30				
1-Methylnaphthalene	90	95	72-123	5	30				
2-Methylnaphthalene	83	87	28-121	5	30				
Naphthalene	104*	95	61-102	9	30				
N-Nitrosodimethylamine	108	99	48-113	8	30				
Di-n-octylphthalate	246*	242*	40-192	2	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226717
Reported: 02/04/11 at 04:25 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Phenanthrene	90	91	12-165	1	30				
Pyrene	123	100	15-153	20	30				
Batch number: 110040013A	Sample number(s): 6172315-6172318,6172320-6172323 UNSPK: 6172316								
2,4-D	105	99	28-161	6	35				
Dalapon	57	103*	12-86	57*	50				
2,4-DB	157	136	20-170	14	50				
Dicamba	72	75	33-120	3	50				
Dinoseb	10	10	1-44	2	35				
2,4-DP (Dichlorprop)	138	113	55-141	20	50				
MCPA	91	129	31-184	34	50				
MCPP (Mecoprop)	38	27	16-174	33	50				
2,4,5-T	60	65	25-132	8	35				
2,4,5-TP	83	93	10-183	11	35				
Batch number: 103640028A	Sample number(s): 6172315-6172318,6172320-6172323 UNSPK: 6172316								
PCB-1016	116	123	29-146	5	50				
PCB-1260	147	152*	39-149	3	50				
Batch number: 103640030A	Sample number(s): 6172315-6172318,6172320-6172323 UNSPK: 6172316								
Aldrin	103	118	16-126	14	50				
Alpha BHC	91	76	10-129	18	50				
Beta BHC	56	50	14-147	12	50				
Gamma BHC - Lindane	91	88	10-140	3	50				
p,p-DDD	85	97	16-163	13	50				
p,p-DDE	171*	202*	18-161	17	50				
p,p-DDT	143	182*	10-176	24	50				
Delta BHC	119	94	23-140	24	50				
Dieldrin	76	97	19-154	25	50				
Endosulfan I	79	91	16-137	14	50				
Endosulfan II	103	106	28-154	3	50				
Endosulfan Sulfate	131	131	21-160	0	50				
Endrin	92	95	11-149	3	50				
Endrin Aldehyde	65	67	10-148	2	35				
Endrin Ketone	102	106	22-165	4	50				
Heptachlor	76	88	13-126	15	50				
Heptachlor Epoxide	100	124	13-157	22	50				
Methoxychlor	83	127	32-147	42	50				
Batch number: 103571026002A	Sample number(s): 6172315-6172323 UNSPK: 6172316 BKG: 6172316								
Antimony	37*	45*	75-125	14	20	0.0932 J	0.0866 J	7 (1)	20
Arsenic	151*	199*	75-125	11	20	5.16	5.63	9	20
Beryllium	111	111	75-125	1	20	0.480	0.449	7 (1)	20
Cadmium	142*	135*	75-125	5	20	0.194	0.180	8 (1)	20
Chromium	150*	166*	75-125	4	20	17.0	16.9	1	20
Cobalt	118	122	75-125	2	20	4.92	5.20	5	20
Copper	126*	132*	75-125	2	20	7.26	7.63	5	20
Lead	164*	179*	75-125	3	20	8.38	8.14	3	20
Nickel	143*	143*	75-125	1	20	10.1	10.7	5	20
Silver	121	121	75-125	0	20	0.0239 J	0.0312 J	27* (1)	20
Thallium	123	124	75-125	0	20	0.247	0.260	5 (1)	20
Vanadium	185*	203*	75-125	3	20	35.5	35.5	0	20
Zinc	226 (2)	210 (2)	75-125	2	20	59.3	61.8	4	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226717
Reported: 02/04/11 at 04:25 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 103571026002B	Sample number(s): 6172315-6172323 UNSPK: 6172316 BKG: 6172316								
Selenium	105	109	75-125	3	20	0.128 J	0.132 J	3 (1)	20
Batch number: 103571026002C	Sample number(s): 6172315-6172323 UNSPK: 6172316 BKG: 6172316								
Molybdenum	139*	140*	75-125	0	20	0.382	0.391	2 (1)	20
Batch number: 103571026002D	Sample number(s): 6172315-6172323 UNSPK: 6172316 BKG: 6172316								
Barium	306 (2)	253 (2)	75-125	5	20	86.9	85.9	1	20
Batch number: 103575708005	Sample number(s): 6172315-6172323 UNSPK: 6172316 BKG: 6172316								
Aluminum	726 (2)	535 (2)	75-125	3	20	12,200	11,600	5	20
Boron	94	92	84-115	2	20	3.89 J	3.90 J	0 (1)	20
Calcium	153 (2)	145 (2)	75-125	1	20	2,460	2,400	2	20
Iron	-881 (2)	-1536 (2)	75-125	4	20	18,500	16,900	9	20
Lithium	97	93	82-114	3	20	24.4	22.3	9	20
Magnesium	-20 (2)	-81 (2)	75-125	2	20	5,230	4,770	9	20
Manganese	49 (2)	40 (2)	75-125	1	20	277	251	10	20
Phosphorus	82 (2)	81 (2)	75-125	0	20	419	406	3	20
Potassium	95	89	75-125	1	20	3,290	3,050	8	20
Sodium	102	99	75-125	3	20	62.6 J	59.3 J	6 (1)	20
Strontium	97	94	75-115	2	20	11.4	11.8	4	20
Tin	88	86	80-110	2	20	1.76 J	1.64 J	7 (1)	20
Titanium	186 (2)	192 (2)	75-125	0	20	1,130	1,080	5	20
Zirconium	93	91	75-125	2	20	3.69 J	3.70 J	0 (1)	20
Batch number: 103575711006	Sample number(s): 6172315-6172323 UNSPK: 6172316 BKG: 6172316								
Mercury	103	102	65-135	6	20	0.0027 U	0.0028 U	0 (1)	20
Batch number: 11013013201A	Sample number(s): 6172315-6172317,6172319-6172323 UNSPK: 6172316 BKG: 6172316								
11a Anions by 300.0 - Fluoride	81		80-120			0.89 J	0.81 J	10 (1)	20
Batch number: 11013013203A	Sample number(s): 6172315-6172317,6172319-6172323 UNSPK: 6172316 BKG: 6172316								
7a Perchlorate EPA 314.0	84		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11019243202A	Sample number(s): 6172315-6172317,6172319-6172323 UNSPK: 6172316 BKG: 6172316								
3a Cr VI by EPA 7199	82		75-125			0.21 J	0.45 J	73* (1)	20
Batch number: 10361039402B	Sample number(s): 6172315-6172316,6172319-6172323 BKG: 6172316								
22a pH by 9045C						6.51	6.46	1	1
Batch number: 10361182102B	Sample number(s): 6172315-6172316,6172319-6172323 BKG: 6172316								
Oxidation Reduction Potential						536	541	1	6
Batch number: 11007162401A	Sample number(s): 6172315-6172323 BKG: 6172316								
28a Moisture Content by 160.3						16.4	15.5	5	20
28a Moisture Content by 160.3						16.4	15.5	5	20
28a Moisture Content by 160.3						16.4	15.5	5	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226717
Reported: 02/04/11 at 04:25 PM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 10363SLJ026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6172315	92	93	95	88	88	80
6172316	91	93	94	87	89	86
6172317	97	97	98	90	92	88
6172318	93	93	95	89	89	86
6172320	92	93	93	88	88	86
6172321	91	92	91	87	88	82
6172322	88	88	92	85	86	77
6172323	91	90	95	86	87	81
Blank	88	90	91	89	90	86
LCS	95	95	99	90	90	89
MS	97	97	98	90	92	88
MSD	93	93	95	89	89	86
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10363SLM026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6172315	99	90	83
6172316	94	86	130
6172317	96	93	127
6172318	100	89	104
6172320	95	90	80
6172321	93	85	81
6172322	89	83	98
6172323	89	85	78
Blank	91	90	88
LCS	90	85	84
MS	96	93	127
MSD	100	89	104
Limits:	40-130	45-130	45-135

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 103640028A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6172315	102	130*
6172316	94	124*
6172317	105	132*
6172318	108	134*
6172320	99	129*
6172321	110	141*
6172322	103	104
6172323	172*	205*
Blank	114	135*
LCS	111	137*
LCSD	83	109
MS	105	132*

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226717
Reported: 02/04/11 at 04:25 PM

Surrogate Quality Control

MSD	108	134*
Limits:	53-139	45-120

Analysis Name: 12a Pesticides by 8081A
Batch number: 103640030A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6172315	46*	34
6172316	67	71
6172317	61	70
6172318	88	75
6172320	63	62
6172321	56	149*
6172322	83	65
6172323	60	31
Blank	32*	102
LCS	29*	99
MS	61	70
MSD	88	75
Limits:	50-130	20-120

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 110040013A

	2,4-Dichlorophenylacetic acid
6172315	74
6172316	83
6172317	95
6172318	94
6172320	89
6172321	78
6172322	71
6172323	37
Blank	103
LCS	94
MS	95
MSD	94
Limits:	36-156

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

13013 1226717 6172315-23

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hexchrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	*TPH-DRO EPA 8015B Mod.	*Metals EPA 6010/6020/7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Tenphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
DUP02-SIV-QC-122110	12.21.10	0952	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									SEDIMENT DUP
DUP1S-SA5B-QC-122110	12.21.10	1052	soil	none	2 16 oz. jars			X			X	X	X	X	X	X												SUBSURFACE DUP
DUP1S-SA5B-QC-122110	12.21.10	1052	soil	none	4 Encore Samplers	X	X																					SUBSURFACE DUP
EB07-SA5B-122110	12.21.10	1212	water	none	6-1 liter ambers			X						X	X			X	X									surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	none	1-500 ml poly							X	X			X												surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	HNO3	1-500 ml poly						X																	surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	HCl	5 40-mL VOA vials				X																		X	surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	none	4 40 Ml VOA vials															X						X		surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	none	4 1L ambers					X												X	X		X			surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	none	1 250 mL glass bottle															X								surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	NaOH	1 500 mL poly																			X				surface tool rinsate
SED-002-SIV-SD-0.0-0.5 MS	12.21.10	0950	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SED-015-SIV-SD-0.0-0.5	12.21.10	1305	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SED-036-SIV-SD-0.0-0.5	12.21.10	1145	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SED-038-SIV-SD-0.0-0.5	12.21.10	1515	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SED-039-SIV-SD-0.0-0.5	12.21.10	1055	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-006-SA5B-SB-4.0-5.0	12.21.10	1529	soil	none	4 16 oz jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-006-SA5B-SB-4.5	12.21.10	1525	soil	none	5 Encore Samplers	X	X		X																				
SL-006-SA5B-SB-5.0-6.0	12.21.10	1539	soil	none	4 16 oz jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	sample appears to be red concrete
SL-006-SA5B-SB-5.5	12.21.10	1535	soil	none	5 Encore Samplers	X	X		X																				sample appears to be red
SL-046-SA5B-SB-4.0-5.0MS	12.21.10	1047	soil	none	6 16 oz. jars			X		X	X	X	X	X	X	X													subsurface MS/MSD
SL-046-SA5B-SB-4.5MS	12.21.10	1041	soil	none	12 Encore Samplers	X	X																						subsurface MS/MSD
SL-046-SA5B-SB-9.0-10.0	12.21.10	1054	soil	none	2 16 oz. jars			X		X	X	X	X	X	X	X													
SL-047-SA5B-SB-4.0-5.0	12.21.10	1254	soil	none	2 16 oz. jars			X		X	X	X	X	X	X	X													
SL-047-SA5B-SB-4.5	12.21.10	1250	soil	none	4 Encore Samplers	X	X																						
SL-159-SA5B-SS-0.0-0.5	12.21.10	1037	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-183-SA5B-SS-0.0-0.5	12.21.10	1025	soil	none	2 x 16 oz. jars & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	
SL-183-SA5B-SS-0.0-0.5	12.21.10	1025	soil	none	5 Encore Samplers	X	X		X																			
SL-219-SA5B-SS-0.0-0.5	12.21.10	0859	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-225-SA5B-SS-0.0-0.5	12.21.10	0935	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-226-SA5B-SS-0.0-0.5	12.21.10	0950	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-227-SA5B-SS-0.0-0.5	12.21.10	0938	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
TB-122110	12.21.10	1212	water	HCl	4-40 mL clear VOA vials	X	X		X																				trip blank

Relinquished by: (Signature) — Date/Time: 12.21.10 | 1630

Received by: (Signature) — Date/Time

Relinquished for Laboratory by: (Signature) — Date/Time: 12/22/10 1056

Airbill(s):
Tracking Numbers 8695 1431 7903, ...7914, ...7925, ...7936

Laboratory: Lancaster Laboratories, Inc.

No. of coolers = 4

SED-002-SIV-SD-0.0-0.5 was a QC sample per PB on 12/22/10. NLM 12/30/10

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 05, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/22/2010
Group Number: 1226722
SDG: DX033
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
DUP02-SIV-QC-122110 Soil	6172362
SED-002-SIV-SD-0.0-0.5 Sediment	6172363
SED-002-SIV-SD-0.0-0.5MS Sediment	6172364
SED-002-SIV-SD-0.0-0.5MSD Sediment	6172365
SED-015-SIV-SD-0.0-0.5 Sediment	6172366
SED-036-SIV-SD-0.0-0.5 Sediment	6172367
SED-038-SIV-SD-0.0-0.5 Sediment	6172368
SED-039-SIV-SD-0.0-0.5 Sediment	6172369

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	CDM Federal Services Program	Attn: Todd Burgesser
1 COPY TO	Data Package Group	

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172362
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP02 SDG#: DX033-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	15.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172362
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP02 SDG#: DX033-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0378	U	0.0378	1.19	1
11031	12378-PeCDD	40321-76-4	0.0676	JBQ	0.0382	5.95	1
11031	123478-HxCDD	39227-28-6	0.0497	JB	0.0383	5.95	1
11031	123678-HxCDD	57653-85-7	0.183	JBQ	0.0385	5.95	1
11031	123789-HxCDD	19408-74-3	0.190	JB	0.0382	5.95	1
11031	1234678-HpCDD	35822-46-9	2.04	JBQ	0.0419	5.95	1
11031	OCDD	3268-87-9	14.7	B	0.0375	11.9	1
11031	2378-TCDF	51207-31-9	0.176	JQ	0.0565	1.19	1
11031	12378-PeCDF	57117-41-6	0.177	JBQ	0.0270	5.95	1
11031	23478-PeCDF	57117-31-4	0.314	JBQ	0.0268	5.95	1
11031	123478-HxCDF	70648-26-9	0.0820	JBQ	0.0270	5.95	1
11031	123678-HxCDF	57117-44-9	0.117	JBQ	0.0237	5.95	1
11031	123789-HxCDF	72918-21-9	0.100	JB	0.0285	5.95	1
11031	234678-HxCDF	60851-34-5	0.138	JB	0.0250	5.95	1
11031	1234678-HpCDF	67562-39-4	0.494	JB	0.0197	5.95	1
11031	1234789-HpCDF	55673-89-7	0.0821	JBQ	0.0283	5.95	1
11031	OCDF	39001-02-0	0.904	JB	0.0465	11.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	77	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	82	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	70	17 - 157
13C12-1278-TCDD (CRS)	83	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172362
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP02 SDG#: DX033-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP02-SIV-QC-122110 Soil
SSFL Area IV Collocated Soil Sampling
DUP02-SIV-QC-122110

LLI Sample # SW 6172362
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:52

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP02 SDG#: DX033-01FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 07:13	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172363
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD002 SDG#: DX033-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	16.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172363
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD002 SDG#: DX033-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0480	U	0.0480	1.20	1
11031	12378-PeCDD	40321-76-4	0.0842	JBQ	0.0465	5.98	1
11031	123478-HxCDD	39227-28-6	0.0793	JBQ	0.0421	5.98	1
11031	123678-HxCDD	57653-85-7	0.149	JBQ	0.0432	5.98	1
11031	123789-HxCDD	19408-74-3	0.203	JB	0.0422	5.98	1
11031	1234678-HpCDD	35822-46-9	2.08	JB	0.0438	5.98	1
11031	OCDD	3268-87-9	13.8	B	0.0410	12.0	1
11031	2378-TCDF	51207-31-9	0.112	JQ	0.0642	1.20	1
11031	12378-PeCDF	57117-41-6	0.201	JB	0.0301	5.98	1
11031	23478-PeCDF	57117-31-4	0.304	JB	0.0300	5.98	1
11031	123478-HxCDF	70648-26-9	0.0899	JBQ	0.0312	5.98	1
11031	123678-HxCDF	57117-44-9	0.0958	JBQ	0.0279	5.98	1
11031	123789-HxCDF	72918-21-9	0.112	JBQ	0.0348	5.98	1
11031	234678-HxCDF	60851-34-5	0.110	JB	0.0306	5.98	1
11031	1234678-HpCDF	67562-39-4	0.578	JB	0.0245	5.98	1
11031	1234789-HpCDF	55673-89-7	0.0704	JB	0.0337	5.98	1
11031	OCDF	39001-02-0	1.09	JBQ	0.0444	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	61	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	74	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	67	17 - 157
13C12-1278-TCDD (CRS)	72	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172363
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD002 SDG#: DX033-02BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172363
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD002 SDG#: DX033-02BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 08:10	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172364
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD002 SDG#: DX033-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	16.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172364
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD002 SDG#: DX033-02MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	25.2		0.0604	1.20	1
11031	12378-PeCDD	40321-76-4	128	B	0.0658	5.98	1
11031	123478-HxCDD	39227-28-6	127	B	0.0614	5.98	1
11031	123678-HxCDD	57653-85-7	126	B	0.0633	5.98	1
11031	123789-HxCDD	19408-74-3	124	B	0.0608	5.98	1
11031	1234678-HpCDD	35822-46-9	127	B	0.0585	5.98	1
11031	OCDD	3268-87-9	260	B	0.0486	12.0	1
11031	2378-TCDF	51207-31-9	26.8		0.0843	1.20	1
11031	12378-PeCDF	57117-41-6	125	B	0.0377	5.98	1
11031	23478-PeCDF	57117-31-4	127	B	0.0390	5.98	1
11031	123478-HxCDF	70648-26-9	122	B	0.0605	5.98	1
11031	123678-HxCDF	57117-44-9	121	B	0.0522	5.98	1
11031	123789-HxCDF	72918-21-9	122	B	0.0669	5.98	1
11031	234678-HxCDF	60851-34-5	121	B	0.0572	5.98	1
11031	1234678-HpCDF	67562-39-4	122	B	0.0450	5.98	1
11031	1234789-HpCDF	55673-89-7	122	B	0.0651	5.98	1
11031	OCDF	39001-02-0	247	B	0.0598	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	80	25 - 181
13C12-123478-HxCDD	75	32 - 141
13C12-123678-HxCDD	75	28 - 130
13C12-123789-HxCDD	76	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	84	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	72	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	85	28 - 143
13C12-1234789-HpCDF	74	26 - 138
13C12-OCDF	71	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-002-SIV-SD-0.0-0.5MS Sediment**
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172364
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD002 SDG#: DX033-02MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5MS Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172364
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD002 SDG#: DX033-02MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 09:07	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172365
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD002 SDG#: DX033-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	16.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172365
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD002 SDG#: DX033-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	25.5		0.0565	1.20	1
11031	12378-PeCDD	40321-76-4	129	B	0.0532	5.98	1
11031	123478-HxCDD	39227-28-6	126	B	0.0530	5.98	1
11031	123678-HxCDD	57653-85-7	126	B	0.0555	5.98	1
11031	123789-HxCDD	19408-74-3	122	B	0.0538	5.98	1
11031	1234678-HpCDD	35822-46-9	126	B	0.0620	5.98	1
11031	OCDD	3268-87-9	261	B	0.0452	12.0	1
11031	2378-TCDF	51207-31-9	27.2		0.0795	1.20	1
11031	12378-PeCDF	57117-41-6	125	B	0.0425	5.98	1
11031	23478-PeCDF	57117-31-4	124	B	0.0415	5.98	1
11031	123478-HxCDF	70648-26-9	121	B	0.102	5.98	1
11031	123678-HxCDF	57117-44-9	121	B	0.0911	5.98	1
11031	123789-HxCDF	72918-21-9	120	B	0.110	5.98	1
11031	234678-HxCDF	60851-34-5	123	B	0.0989	5.98	1
11031	1234678-HpCDF	67562-39-4	121	B	0.0498	5.98	1
11031	1234789-HpCDF	55673-89-7	123	B	0.0669	5.98	1
11031	OCDF	39001-02-0	247	B	0.0548	12.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	78	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	69	26 - 152
13C12-123678-HxCDF	75	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	70	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172365
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD002 SDG#: DX033-02MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-002-SIV-SD-0.0-0.5MSD Sediment
SSFL Area IV Collocated Soil Sampling
SED-002-SIV-SD-0.0-0.5

LLI Sample # SW 6172365
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 09:50

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD002 SDG#: DX033-02MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 10:04	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172366
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD015 SDG#: DX033-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	23.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172366
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD015 SDG#: DX033-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0569	U	0.0569	1.30	1
11031	12378-PeCDD	40321-76-4	0.419	JB	0.0572	6.51	1
11031	123478-HxCDD	39227-28-6	0.281	JB	0.0583	6.51	1
11031	123678-HxCDD	57653-85-7	0.511	JB	0.0613	6.51	1
11031	123789-HxCDD	19408-74-3	0.524	JB	0.0598	6.51	1
11031	1234678-HpCDD	35822-46-9	5.17	JB	0.0577	6.51	1
11031	OCDD	3268-87-9	65.2	B	0.0473	13.0	1
11031	2378-TCDF	51207-31-9	0.349	JQ	0.0932	1.30	1
11031	12378-PeCDF	57117-41-6	0.452	JB	0.0400	6.51	1
11031	23478-PeCDF	57117-31-4	0.787	JB	0.0387	6.51	1
11031	123478-HxCDF	70648-26-9	0.334	JB	0.0461	6.51	1
11031	123678-HxCDF	57117-44-9	0.373	JB	0.0422	6.51	1
11031	123789-HxCDF	72918-21-9	0.331	JB	0.0521	6.51	1
11031	234678-HxCDF	60851-34-5	0.510	JB	0.0465	6.51	1
11031	1234678-HpCDF	67562-39-4	1.12	JB	0.0329	6.51	1
11031	1234789-HpCDF	55673-89-7	0.314	JBQ	0.0447	6.51	1
11031	OCDF	39001-02-0	2.04	JB	0.0478	13.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	78	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	74	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	83	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	84	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-015-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172366
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD015 SDG#: DX033-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-015-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-015-SIV-SD-0.0-0.5

LLI Sample # SW 6172366
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 13:05

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD015 SDG#: DX033-03

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 11:00	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172367
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD036 SDG#: DX033-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	20.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172367
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD036 SDG#: DX033-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0521 U	0.0521	1.26	1
11031	12378-PeCDD	40321-76-4	0.112 JBQ	0.0473	6.32	1
11031	123478-HxCDD	39227-28-6	0.0608 JB	0.0402	6.32	1
11031	123678-HxCDD	57653-85-7	0.106 JBQ	0.0431	6.32	1
11031	123789-HxCDD	19408-74-3	0.0675 JB	0.0407	6.32	1
11031	1234678-HpCDD	35822-46-9	1.22 JB	0.0513	6.32	1
11031	OCDD	3268-87-9	6.76 JB	0.0416	12.6	1
11031	2378-TCDF	51207-31-9	0.175 JQ	0.0689	1.26	1
11031	12378-PeCDF	57117-41-6	0.148 JBQ	0.0298	6.32	1
11031	23478-PeCDF	57117-31-4	0.299 JBQ	0.0287	6.32	1
11031	123478-HxCDF	70648-26-9	0.0784 JBQ	0.0281	6.32	1
11031	123678-HxCDF	57117-44-9	0.0969 JB	0.0244	6.32	1
11031	123789-HxCDF	72918-21-9	0.0759 JB	0.0288	6.32	1
11031	234678-HxCDF	60851-34-5	0.131 JB	0.0260	6.32	1
11031	1234678-HpCDF	67562-39-4	0.321 JBQ	0.0198	6.32	1
11031	1234789-HpCDF	55673-89-7	0.0505 JBQ	0.0263	6.32	1
11031	OCDF	39001-02-0	0.491 JB	0.0539	12.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	74	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-036-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172367
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD036 SDG#: DX033-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-036-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-036-SIV-SD-0.0-0.5

LLI Sample # SW 6172367
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 11:45

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD036 SDG#: DX033-04

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 11:57	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172368
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD038 SDG#: DX033-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172368
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD038 SDG#: DX033-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.145	JQ	0.111	1.14	1
11031	12378-PeCDD	40321-76-4	1.51	JB	0.180	5.72	1
11031	123478-HxCDD	39227-28-6	2.89	JB	0.126	5.72	1
11031	123678-HxCDD	57653-85-7	12.1	B	0.131	5.72	1
11031	123789-HxCDD	19408-74-3	6.93	B	0.131	5.72	1
11031	1234678-HpCDD	35822-46-9	262	B	0.205	5.72	1
11031	OCDD	3268-87-9	1,750	B	0.163	11.4	1
11031	2378-TCDF	51207-31-9	0.217	JQ	0.125	1.14	1
11031	12378-PeCDF	57117-41-6	0.274	JB	0.0673	5.72	1
11031	23478-PeCDF	57117-31-4	0.598	JB	0.0695	5.72	1
11031	123478-HxCDF	70648-26-9	0.670	JB	0.113	5.72	1
11031	123678-HxCDF	57117-44-9	0.665	JB	0.0992	5.72	1
11031	123789-HxCDF	72918-21-9	0.358	JB	0.126	5.72	1
11031	234678-HxCDF	60851-34-5	1.07	JB	0.108	5.72	1
11031	1234678-HpCDF	67562-39-4	17.5	B	0.0807	5.72	1
11031	1234789-HpCDF	55673-89-7	2.10	JB	0.115	5.72	1
11031	OCDF	39001-02-0	43.7	B	0.109	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	59	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	94	17 - 157
13C12-2378-TCDF	61	24 - 169
13C12-12378-PeCDF	69	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	71	26 - 123
13C12-234678-HxCDF	65	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	80	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	79	17 - 157
13C12-1278-TCDD (CRS)	72	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-038-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172368
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD038 SDG#: DX033-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-038-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-038-SIV-SD-0.0-0.5

LLI Sample # SW 6172368
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 15:15

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD038 SDG#: DX033-05

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 12:54	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172369
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD039 SDG#: DX033-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	24.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172369
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD039 SDG#: DX033-06*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0634	U	0.0634	1.33	1
11031	12378-PeCDD	40321-76-4	0.223	JBQ	0.0637	6.63	1
11031	123478-HxCDD	39227-28-6	0.114	JBQ	0.0493	6.63	1
11031	123678-HxCDD	57653-85-7	0.257	JBQ	0.0513	6.63	1
11031	123789-HxCDD	19408-74-3	0.217	JBQ	0.0475	6.63	1
11031	1234678-HpCDD	35822-46-9	2.51	JB	0.0649	6.63	1
11031	OCDD	3268-87-9	18.1	B	0.0489	13.3	1
11031	2378-TCDF	51207-31-9	0.172	JQ	0.0889	1.33	1
11031	12378-PeCDF	57117-41-6	0.175	JB	0.0381	6.63	1
11031	23478-PeCDF	57117-31-4	0.353	JBQ	0.0365	6.63	1
11031	123478-HxCDF	70648-26-9	0.150	JB	0.0390	6.63	1
11031	123678-HxCDF	57117-44-9	0.108	JB	0.0332	6.63	1
11031	123789-HxCDF	72918-21-9	0.0824	JBQ	0.0434	6.63	1
11031	234678-HxCDF	60851-34-5	0.107	JB	0.0359	6.63	1
11031	1234678-HpCDF	67562-39-4	0.459	JB	0.0282	6.63	1
11031	1234789-HpCDF	55673-89-7	0.0903	JB	0.0443	6.63	1
11031	OCDF	39001-02-0	0.901	JBQ	0.0650	13.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	94	25 - 181
13C12-123478-HxCDD	86	32 - 141
13C12-123678-HxCDD	86	28 - 130
13C12-123789-HxCDD	87	28 - 130
13C12-1234678-HpCDD	96	23 - 140
13C12-OCDD	95	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	101	24 - 185
13C12-23478-PeCDF	87	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	90	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	82	29 - 147
13C12-1234678-HpCDF	104	28 - 143
13C12-1234789-HpCDF	82	26 - 138
13C12-OCDF	79	17 - 157
13C12-1278-TCDD (CRS)	99	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-039-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172369
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD039 SDG#: DX033-06*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-039-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-039-SIV-SD-0.0-0.5

LLI Sample # SW 6172369
LLI Group # 1226722
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/21/2010 10:55

Submitted: 12/22/2010 10:55
Reported: 02/05/2011 15:00

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD039 SDG#: DX033-06*

General Sample Comments

State of California Lab Certification No. 2501
The temperature of the sample bottle(s) upon receipt at the lab was 6.4 - 9.0 C using an IR thermometer.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11017001	01/29/2011 13:50	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11017001	01/17/2011 13:15	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401A	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226722
Reported: 02/05/11 at 03:00 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11007162401A	Sample number(s): 6172362-6172369								
28a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11017001	Sample number(s): 6172362-6172369								
2378-TCDD	0.0282 U	0.0282	1.00	ng/kg	106		67-158		
12378-PeCDD	0.0434 J	0.0279	5.00	ng/kg	106		70-142		
123478-HxCDD	0.0203 J	0.0200	5.00	ng/kg	102		70-164		
123678-HxCDD	0.0286 J	0.0203	5.00	ng/kg	104		76-134		
123789-HxCDD	0.0508 J	0.0200	5.00	ng/kg	100		64-162		
1234678-HpCDD	0.179 J	0.0317	5.00	ng/kg	102		70-140		
OCDD	0.535 J	0.0277	10.0	ng/kg	101		78-144		
2378-TCDF	0.0334 U	0.0334	1.00	ng/kg	112		75-158		
12378-PeCDF	0.0412 J	0.0165	5.00	ng/kg	104		80-134		
23478-PeCDF	0.0797 J	0.0152	5.00	ng/kg	104		68-160		
123478-HxCDF	0.0517 J	0.0151	5.00	ng/kg	100		72-134		
123678-HxCDF	0.0385 J	0.0134	5.00	ng/kg	99		84-130		
123789-HxCDF	0.0382 J	0.0162	5.00	ng/kg	100		78-130		
234678-HxCDF	0.0441 J	0.0145	5.00	ng/kg	103		70-156		
1234678-HpCDF	0.0827 J	0.0108	5.00	ng/kg	100		82-122		
1234789-HpCDF	0.0521 J	0.0149	5.00	ng/kg	101		78-138		
OCDF	0.232 J	0.0346	10.0	ng/kg	102		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11007162401A	Sample number(s): 6172362-6172369					BKG: P172316			
28a Moisture Content by 160.3						16.4	15.5	5	20
Batch number: 11017001	Sample number(s): 6172362-6172369					UNSPK: 6172363			
2378-TCDD	105	107	67-158	1	25				
12378-PeCDD	107	108	70-142	1	25				
123478-HxCDD	106	105	70-164	1	25				
123678-HxCDD	105	105	76-134	0	25				
123789-HxCDD	104	102	64-162	2	25				
1234678-HpCDD	105	104	70-140	1	25				
OCDD	103	103	78-144	0	25				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226722
Reported: 02/05/11 at 03:00 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2378-TCDF	111	113	75-158	1	25				
12378-PeCDF	104	104	80-134	0	25				
23478-PeCDF	106	104	68-160	2	25				
123478-HxCDF	102	101	72-134	1	25				
123678-HxCDF	101	101	84-130	1	25				
123789-HxCDF	102	101	78-130	2	25				
234678-HxCDF	101	103	70-156	1	25				
1234678-HpCDF	101	101	82-122	0	25				
1234789-HpCDF	102	103	78-138	1	25				
OCDF	103	103	63-170	0	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11017001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6172362	68	79	72	78	73	77
6172363	61	74	66	72	67	71
6172364	66	79	69	78	72	75
6172365	65	78	69	75	70	73
6172366	70	83	72	79	73	77
6172367	65	78	68	74	71	78
6172368	59	63	63	71	65	65
6172369	80	87	79	90	81	82
Blank	81	89	80	90	83	88
MS	66	79	69	78	72	75
MSD	65	78	69	75	70	73
OPR	65	76	66	74	68	70
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6172362	85	74	70	83	81	76
6172363	76	71	67	72	74	70
6172364	85	74	71	80	80	75
6172365	81	72	70	77	78	74
6172366	84	78	75	86	83	78
6172367	81	76	73	78	78	74
6172368	80	73	79	72	64	69
6172369	104	82	79	99	94	86
Blank	97	89	87	97	88	88
MS	85	74	71	80	80	75
MSD	81	72	70	77	78	74
OPR	84	66	60	81	78	76

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226722
Reported: 02/05/11 at 03:00 PM

Surrogate Quality Control

Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6172362	79	77	83	82	72	86
6172363	69	71	76	76	65	76
6172364	75	76	82	81	70	84
6172365	73	74	79	78	68	81
6172366	77	78	84	83	74	87
6172367	73	74	80	79	68	81
6172368	70	68	80	94	61	69
6172369	86	87	96	95	82	101
Blank	88	89	98	98	80	93
MS	75	76	82	81	70	84
MSD	73	74	79	78	68	81
OPR	73	75	81	80	66	81
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1226722 6172362-69

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hexachrome analysis, lab will measure pH and ORP

Samplers: *(Signature)*

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	**TPH-EFH EPA 8015B Mod.	*Metals EPA 6010/6020/7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Diovin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terpenes EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
DUP02-SIV-QC-122110	12.21.10	0952	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									SEDIMENT DUP
DUP15-SA5B-QC-122110	12.21.10	1052	soil	none	2 16 oz. jars			X			X	X	X	X	X	X													SUBSURFACE DUP
DUP15-SA5B-QC-122110	12.21.10	1052	soil	none	4 Encore Samplers	X	X																						SUBSURFACE DUP
EB07-SA5B-122110	12.21.10	1212	water	none	6-1 liter ambers			X						X	X			X	X										surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	none	1-500 ml poly							X	X			X													surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	HNO3	1-500 ml poly						X																		surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	HCl	5 40-mL VOA vials				X																			X	surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	none	4 40 Ml VOA vials															X							X		surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	none	4 1L ambers					X												X	X			X			surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	none	1 250 mL glass bottle																X								surface tool rinsate
EB07-SA5B-122110	12.21.10	1212	water	NaOH	1 500 mL poly																			X					surface tool rinsate
SED-002-SIV-SD-0.0-0.5 MS	12.21.10	0950	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										MS/MSD sample
SED-015-SIV-SD-0.0-0.5	12.21.10	1305	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-036-SIV-SD-0.0-0.5	12.21.10	1145	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-038-SIV-SD-0.0-0.5	12.21.10	1515	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SED-039-SIV-SD-0.0-0.5	12.21.10	1055	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-006-SA5B-SB-4.0-5.0	12.21.10	1529	soil	none	4 16 oz jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-006-SA5B-SB-4.5	12.21.10	1525	soil	none	5 Encore Samplers	X	X		X																				
SL-006-SA5B-SB-5.0-6.0	12.21.10	1539	soil	none	4 16 oz jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	sample appears to be red concrete
SL-006-SA5B-SB-5.5	12.21.10	1535	soil	none	5 Encore Samplers	X	X		X																				sample appears to be red
SL-046-SA5B-SB-4.0-5.0MS	12.21.10	1047	soil	none	6 16 oz. jars			X		X	X	X	X	X	X	X													subsurface MS/MSD
SL-046-SA5B-SB-4.5MS	12.21.10	1041	soil	none	12 Encore Samplers	X	X																						subsurface MS/MSD
SL-046-SA5B-SB-9.0-10.0	12.21.10	1054	soil	none	2 16 oz. jars			X		X	X	X	X	X	X	X													
SL-047-SA5B-SB-4.0-5.0	12.21.10	1254	soil	none	2 16 oz. jars			X		X	X	X	X	X	X	X													
SL-047-SA5B-SB-4.5	12.21.10	1250	soil	none	4 Encore Samplers	X	X																						
SL-159-SA5B-SS-0.0-0.5	12.21.10	1037	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-183-SA5B-SS-0.0-0.5	12.21.10	1025	soil	none	2 x 16 oz. jars & 1 6" sleeve			X		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-183-SA5B-SS-0.0-0.5	12.21.10	1025	soil	none	5 Encore Samplers	X	X		X																				
SL-219-SA5B-SS-0.0-0.5	12.21.10	0859	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-225-SA5B-SS-0.0-0.5	12.21.10	0935	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-226-SA5B-SS-0.0-0.5	12.21.10	0950	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-227-SA5B-SS-0.0-0.5	12.21.10	0938	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
TB-122110	12.21.10	1212	water	HCl	4-40 mL clear VOA vials	X	X		X																				trip blank

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Laboratory:
	12.21.10 1630		12/22/10 1056	Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time	Airbill #		
		Tracking Numbers 8695 1431 7903, ...7914, ...7925, ...7936		No. of coolers = 4

SED-002-SIV-SD-0.0-0.5 was an MS/MSD sample per PB on 12/22/10. NLM 12/28/10

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 01, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/23/2010
Group Number: 1226926
SDG: DE051
PO Number: 1203-004-007-AL
Release Number: Tracking #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
DUP10-SA5B-QC-122210 Soil	6173160
EB08-SA5B-122210 Water	6173161
FB06-SA5B-122210 Water	6173162
SED-010-SIV-SD-0.0-0.5 Soil	6173163
SL-101-SA5B-SS-0.0-0.5 Soil	6173164
SL-117-SA5B-SS-0.0-0.5 Soil	6173165
SL-118-SA5B-SS-0.0-0.5 Soil	6173166
SL-100-SA5B-SS-0.0-0.5 Soil	6173167
SL-100-SA5B-SS-0.0-0.5MS Soil	6173168
SL-100-SA5B-SS-0.0-0.5MSD Soil	6173169
SL-100-SA5B-SS-0.0-0.5DUP Soil	6173170
SL-114-SA5B-SS-0.0-0.5 Soil	6173171
SL-102-SA5B-SS-0.0-0.5 Soil	6173172
SL-024-SA5B-SS-0.0-0.5 Soil	6173173
SL-157-SA5B-SB-4.0-5.0 Soil	6173174
SL-158-SA5B-SB-4.0-5.0 Soil	6173175
SL-157-SA5B-SB-9.0-10.0 Soil	6173176
SL-145-SA5B-SB-4.0-5.0 Soil	6173177
TB-122210 Water	6173178

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ELECTRONIC COPY TO CDM Federal Services Program Attn: Todd Burgesser

1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Martha L. Seidel
Senior Chemist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173160
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP10 SDG#: DE051-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	580		1
04688	Benzidine	92-87-5	1,400	U	1,400	3,900		1
04688	Benzoic acid	65-85-0	190	U	190	580		1
04688	Benzyl alcohol	100-51-6	190	U	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580		1
04688	2,4-Dinitrophenol	51-28-5	770	U	770	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	23	J	19	390		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	39	U	39	190		1
04688	4-Methylphenol	106-44-5	39	U	39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	39	U	39	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	580		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173160
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP10 SDG#: DE051-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.77	U	0.77	1.9		1
10138	Acenaphthylene	208-96-8	0.39	U	0.39	1.9		1
10138	Anthracene	120-12-7	0.39	U	0.39	1.9		1
10138	Benzo(a)anthracene	56-55-3	1.6	J	0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	2.0		0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	3.7		0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	1.4	J	0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	1.2	J	0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	7.0	U	7.0	21		1
10138	Di-n-butylphthalate	84-74-2	7.0	U	7.0	21		1
10138	Chrysene	218-01-9	2.2		0.39	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.77	U	0.77	1.9		1
10138	Diethylphthalate	84-66-2	7.0	U	7.0	21		1
10138	Dimethylphthalate	131-11-3	7.0	U	7.0	21		1
10138	Fluoranthene	206-44-0	2.6		0.77	1.9		1
10138	Fluorene	86-73-7	0.77	U	0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.97	J	0.77	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.77	U	0.77	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.77	U	0.77	1.9		1
10138	Naphthalene	91-20-3	0.77	U	0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.77	U	0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	7.0	U	7.0	21		1
10138	Phenanthrene	85-01-8	0.77	U	0.77	1.9		1
10138	Pyrene	129-00-0	2.7		0.77	1.9		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.2		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	1.7	J	0.72	2.0		1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.93	U	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93	U	0.93	2.0		1
10401	MCPA	94-74-6	100	U	100	290		1
10401	MCPP (Mecoprop)	93-65-2	430		87	290		1
10401	2,4,5-T	93-76-5	0.095	U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.087	U	0.087	0.20		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
2,4-DB was detected in the method blank at a concentration of 1.1 ug/kg. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173160
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP10 SDG#: DE051-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	2,4-DB.							
	Due to interfering peaks on the chromatogram, the values reported for MCPA represent the lowest reporting limits attainable.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.070	U	0.070	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	0.93	U	0.93	3.9		1
01363	p,p-DDD	72-54-8	0.16	U	0.16	0.39		1
01363	p,p-DDE	72-55-9	0.076	U	0.076	0.39		1
01363	p,p-DDT	50-29-3	0.29	U	0.29	0.39		1
01363	Delta BHC	319-86-8	0.042	U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.090	U	0.090	0.39		1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076	U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076	U	0.076	0.39		1
01363	Endrin	72-20-8	0.076	U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.076	U	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.070	U	0.070	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.044	U	0.044	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.15	U	0.15	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	2.1	J	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.58	U	0.58	2.0		1
10225	PCB-1232	11141-16-5	0.60	U	0.60	2.0		1
10225	PCB-1242	53469-21-9	0.58	U	0.58	2.0		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0		1
10225	PCB-1254	11097-69-1	6.4		0.38	2.0		1
10225	PCB-1260	11096-82-5	2.5		0.38	2.0		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	13,900		5.66	22.5		1
07914	Boron	7440-42-8	4.36	J	1.00	5.62		1
01650	Calcium	7440-70-2	3,070		6.90	22.5		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173160
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP10 SDG#: DE051-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01654	Iron	7439-89-6	18,600		5.30	22.5		1
01656	Lithium	7439-93-2	21.0		0.25	2.2		1
01657	Magnesium	7439-95-4	4,260		2.86	11.2		1
06958	Manganese	7439-96-5	261		0.0877	0.562		1
10145	Phosphorus	7723-14-0	361		0.630	11.2		1
01662	Potassium	7440-09-7	2,800		20.2	56.2		1
01667	Sodium	7440-23-5	92.3	J	42.0	112		1
07968	Strontium	7440-24-6	18.7		0.0697	0.562		1
06969	Tin	7440-31-5	2.22	J	1.12	11.2		1
06970	Titanium	7440-32-6	1,120		0.427	1.12		1
10146	Zirconium	7440-67-7	1.88	J	0.945	5.62		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0960	J	0.0695	0.232		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.90		0.0695	0.463		2
06126	Barium	7440-39-3	98.1		0.125	0.463		2
06127	Beryllium	7440-41-7	0.467		0.0185	0.116		2
06128	Cadmium	7440-43-9	0.133		0.0417	0.116		2
06131	Chromium	7440-47-3	16.6		0.139	0.463		2
06132	Cobalt	7440-48-4	5.52		0.0232	0.116		2
06133	Copper	7440-50-8	11.2		0.0735	0.446		2
06135	Lead	7439-92-1	5.68		0.0121	0.232		2
06138	Molybdenum	7439-98-7	0.615		0.0579	0.116		2
06139	Nickel	7440-02-0	11.8		0.116	0.463		2
06141	Selenium	7782-49-2	0.121	J	0.0463	0.463		2
06142	Silver	7440-22-4	0.0302	J	0.0139	0.116		2
06145	Thallium	7440-28-0	0.259		0.0348	0.116		2
06148	Vanadium	7440-62-2	39.4		0.0245	0.111		2
06149	Zinc	7440-66-6	56.2		0.649	3.48		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0128	J	0.0032	0.113		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3		0.93	1.2		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4	U	10.4	34.8		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.39	J	0.23	1.2		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	429		10.0	10.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173160
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP10 SDG#: DE051-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.17	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	13.7	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 02:15	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 12:20	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 04:53	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 18:08	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 05:52	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173160
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP10 SDG#: DE051-01FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 09:58	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 13:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:28	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 13:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 13:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:28	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 13:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:20	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 12:11	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 20:56	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 19:21	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB08-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173161
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-08 SDG#: DE051-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/l		ug/l	ug/l	ug/l	
04678	Aniline	62-53-3	1	U	1	5		1
04678	Benzidine	92-87-5	21	U	21	64		1
04678	Benzoic acid	65-85-0	6	U	6	16		1
04678	Benzyl alcohol	100-51-6	5	U	5	16		1
04678	4-Bromophenyl-phenylether	101-55-3	1	U	1	5		1
04678	Carbazole	86-74-8	1	U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1	U	1	5		1
04678	4-Chloroaniline	106-47-8	1	U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1	U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2	U	2	5		1
04678	2-Chlorophenol	95-57-8	1	U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2	U	2	5		1
04678	Dibenzofuran	132-64-9	1	U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1	U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3	U	3	11		1
04678	3,5-Dimethylphenol	108-68-9	3	U	3	11		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	16		1
04678	2,4-Dinitrophenol	51-28-5	11	U	11	32		1
04678	2,4-Dinitrotoluene	121-14-2	1	U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1	U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1	U	1	5		1
04678	Hexachlorobenzene	118-74-1	1	U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1	U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5	U	5	16		1
04678	Hexachloroethane	67-72-1	1	U	1	5		1
04678	Isophorone	78-59-1	1	U	1	5		1
04678	2-Methylphenol	95-48-7	1	U	1	5		1
04678	4-Methylphenol	106-44-5	2	U	2	5		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1	U	1	5		1
04678	3-Nitroaniline	99-09-2	1	U	1	5		1
04678	4-Nitroaniline	100-01-6	1	U	1	5		1
04678	Nitrobenzene	98-95-3	1	U	1	5		1
04678	2-Nitrophenol	88-75-5	1	U	1	5		1
04678	4-Nitrophenol	100-02-7	11	U	11	32		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2	U	2	5		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04678	Pentachlorophenol	87-86-5	3	U	3	16		1
04678	Phenol	108-95-2	1	U	1	5		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB08-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173161
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-08 SDG#: DE051-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l		ug/l	ug/l	ug/l	
04678	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1	U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1	U	1	5		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l		ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.011	U	0.011	0.053		1
10137	Acenaphthylene	208-96-8	0.011	U	0.011	0.053		1
10137	Anthracene	120-12-7	0.011	U	0.011	0.053		1
10137	Benzo(a)anthracene	56-55-3	0.011	U	0.011	0.053		1
10137	Benzo(a)pyrene	50-32-8	0.011	U	0.011	0.053		1
10137	Benzo(b)fluoranthene	205-99-2	0.011	U	0.011	0.053		1
10137	Benzo(g,h,i)perylene	191-24-2	0.011	U	0.011	0.053		1
10137	Benzo(k)fluoranthene	207-08-9	0.011	U	0.011	0.053		1
10137	Butylbenzylphthalate	85-68-7	0.067	J	0.053	1.1		1
10137	Di-n-butylphthalate	84-74-2	0.40	J	0.053	1.1		1
10137	Chrysene	218-01-9	0.011	U	0.011	0.053		1
10137	Dibenz(a,h)anthracene	53-70-3	0.011	U	0.011	0.053		1
10137	Diethylphthalate	84-66-2	0.098	J	0.053	1.1		1
10137	Dimethylphthalate	131-11-3	0.053	U	0.053	1.1		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.25	J	0.053	1.1		1
10137	Fluoranthene	206-44-0	0.011	U	0.011	0.053		1
10137	Fluorene	86-73-7	0.011	U	0.011	0.053		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.011	U	0.011	0.053		1
10137	1-Methylnaphthalene	90-12-0	0.011	U	0.011	0.053		1
10137	2-Methylnaphthalene	91-57-6	0.011	U	0.011	0.053		1
10137	Naphthalene	91-20-3	0.034	J	0.011	0.053		1
10137	N-Nitrosodimethylamine	62-75-9	0.011	U	0.011	0.053		1
10137	Di-n-octylphthalate	117-84-0	0.083	J	0.053	1.1		1
10137	Phenanthrene	85-01-8	0.011	U	0.011	0.053		1
10137	Pyrene	129-00-0	0.011	U	0.011	0.053		1

The QC limits for n-nitrosodimethylamine and dimethylphthalate are advisory only until sufficient data points can be obtained to calculate statistical limits.

The following compounds were detected in the method blank at the respective concentrations of:
butylbenzylphthalate .056 ug/l
bis(2-ethylhexyl)phthalate .056 ug/l
di-n-octylphthalate .082 ug/l
These blank values were not subtracted from the analytical results.

Reporting limits were raised due to limited sample volume.

Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	ug/l	
10407	2,4-D	94-75-7	0.16	U	0.16	0.51		1
10407	Dalapon	75-99-0	0.26	U	0.26	1.3		1
10407	2,4-DB	94-82-6	0.31	U	0.31	1.0		1
10407	Dicamba	1918-00-9	0.082	U	0.082	0.31		1
10407	Dinoseb	88-85-7	0.10	U	0.10	0.51		1
10407	2,4-DP (Dichlorprop)	120-36-5	0.16	U	0.16	0.51		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB08-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173161
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-08 SDG#: DE051-02EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	ug/l	
10407	MCPA	94-74-6	310	U	310	1,000		1
10407	MCPP	93-65-2	51	U	51	200		1
10407	2,4,5-T	93-76-5	0.015	U	0.015	0.051		1
10407	2,4,5-TP	93-72-1	0.010	U	0.010	0.051		1
Pesticides/PCBs	**SW-846 8081A**		ug/l		ug/l	ug/l	ug/l	
00177	Aldrin	309-00-2	0.0021	U	0.0021	0.010		1
00177	Alpha BHC	319-84-6	0.0031	U	0.0031	0.010		1
00177	Beta BHC	319-85-7	0.0030	U	0.0030	0.010		1
00177	Gamma BHC - Lindane	58-89-9	0.0021	U	0.0021	0.010		1
00177	Chlordane	57-74-9	0.12	U	0.12	0.52		1
00177	p,p-DDD	72-54-8	0.0052	U	0.0052	0.021		1
00177	p,p-DDE	72-55-9	0.0052	U	0.0052	0.021		1
00177	p,p-DDT	50-29-3	0.0052	U	0.0052	0.021		1
00177	Delta BHC	319-86-8	0.0030	U	0.0030	0.010		1
00177	Dieldrin	60-57-1	0.0055	U	0.0055	0.021		1
00177	Endosulfan I	959-98-8	0.0045	U	0.0045	0.010		1
00177	Endosulfan II	33213-65-9	0.016	U	0.016	0.021		1
00177	Endosulfan Sulfate	1031-07-8	0.0060	U	0.0060	0.021		1
00177	Endrin	72-20-8	0.0084	U	0.0084	0.021		1
00177	Endrin Aldehyde	7421-93-4	0.021	U	0.021	0.10		1
00177	Endrin Ketone	53494-70-5	0.0052	U	0.0052	0.021		1
00177	Heptachlor	76-44-8	0.0027	U	0.0027	0.010		1
00177	Heptachlor Epoxide	1024-57-3	0.0024	U	0.0024	0.010		1
00177	Methoxychlor	72-43-5	0.031	U	0.031	0.10		1
00177	Mirex	2385-85-5	0.088	U	0.088	0.26		1
00177	Toxaphene	8001-35-2	1.0	U	1.0	3.1		1
Pesticides/PCBs	**SW-846 8082**		ug/l		ug/l	ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10	U	0.10	0.52		1
10227	Aroclor 5442	12642-23-8	0.10	U	0.10	0.52		1
10227	Aroclor 5460	11126-42-4	0.10	U	0.10	0.52		1
10227	PCB-1016	12674-11-2	0.10	U	0.10	0.52		1
10227	PCB-1221	11104-28-2	0.10	U	0.10	0.52		1
10227	PCB-1232	11141-16-5	0.21	U	0.21	0.52		1
10227	PCB-1242	53469-21-9	0.10	U	0.10	0.52		1
10227	PCB-1248	12672-29-6	0.10	U	0.10	0.52		1
10227	PCB-1254	11097-69-1	0.10	U	0.10	0.52		1
10227	PCB-1260	11096-82-5	0.10	U	0.10	0.52		1
10227	PCB-1262	37324-23-5	0.21	U	0.21	0.52		1
10227	PCB-1268	11100-14-4	0.17	U	0.17	0.52		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
Metals	**SW-846 6010B**		mg/l		mg/l	mg/l	mg/l	
01743	Aluminum	7429-90-5	0.0834	U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138	U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702	U	0.0702	0.200		1
01754	Iron	7439-89-6	0.0640	J	0.0522	0.200		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB08-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173161
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-08 SDG#: DE051-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500		1
	SW-846 6020		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00038 U	0.00038	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000055 J	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020		1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
	EPA 314.0		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
	SW-846 7199		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: **EB08-SA5B-122210 Water**
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173161
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-08 SDG#: DE051-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	10362WAE026	01/20/2011 14:57	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362WAC026	01/06/2011 13:09	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	10362WAE026	12/29/2010 00:30	Sherry L Morrow	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	10362WAC026	12/28/2010 16:15	Timothy J Attenberger	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	103620008A	12/31/2010 01:07	Michele D Hamilton	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103570023A	01/14/2011 00:54	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	103570024A	01/06/2011 16:49	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	103570024A	12/26/2010 12:20	Karen L Beyer	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	103570023A	12/26/2010 12:20	Karen L Beyer	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	103620008A	12/28/2010 20:30	Elaine F Stoltzfus	1
01743	Aluminum	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
08014	Boron	SW-846 6010B	1	103651848001	01/05/2011 18:36	John P Hook	1
01750	Calcium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
01754	Iron	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
01756	Lithium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
01757	Magnesium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
07058	Manganese	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
10143	Phosphorus	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
01762	Potassium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
01767	Sodium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
08068	Strontium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
07069	Tin	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
07070	Titanium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
10144	Zirconium	SW-846 6010B	1	103651848001	01/04/2011 18:04	John P Hook	1
06024	Antimony	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06026	Barium	SW-846 6020	1	103656050001D	01/06/2011 08:26	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06033	Copper	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06035	Lead	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	103656050001C	01/06/2011 08:26	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	103656050001B	01/06/2011 08:26	Choon Y Tian	1
06042	Silver	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	103656050001A	01/06/2011 08:26	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	103575713005	12/28/2010 15:39	Parker D Lindstrom	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **EB08-SA5B-122210 Water**
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173161
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-08 SDG#: DE051-02EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	103651848001	01/04/2011 08:43	Denise K Conners	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	103656050001	01/04/2011 08:40	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	103575713005	12/23/2010 15:50	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	10364196902A	12/31/2010 00:43	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	10363658701A	12/29/2010 15:17	Ashley M Adams	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	10357113001A	12/23/2010 13:52	Nicole M Kepley	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	6	U	6	20		1
10904	Benzene	71-43-2	0.5	U	0.5	5		1
10904	Bromobenzene	108-86-1	1	U	1	5		1
10904	Bromochloromethane	74-97-5	1	U	1	5		1
10904	Bromodichloromethane	75-27-4	1	U	1	5		1
10904	Bromoform	75-25-2	1	U	1	5		1
10904	Bromomethane	74-83-9	1	U	1	5		1
10904	2-Butanone	78-93-3	3	U	3	10		1
10904	n-Butylbenzene	104-51-8	1	U	1	5		1
10904	sec-Butylbenzene	135-98-8	1	U	1	5		1
10904	tert-Butylbenzene	98-06-6	1	U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1	U	1	5		1
10904	Chlorobenzene	108-90-7	0.8	U	0.8	5		1
10904	Chloroethane	75-00-3	1	U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2	U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.							
10904	Chloroform	67-66-3	1	J	0.8	5		1
10904	Chloromethane	74-87-3	1	U	1	5		1
10904	2-Chlorotoluene	95-49-8	1	U	1	5		1
10904	4-Chlorotoluene	106-43-4	1	U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2	U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2	U	2	5		1
10904	Dibromochloromethane	124-48-1	1	U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1	U	1	5		1
10904	Dibromomethane	74-95-3	1	U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2	U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1	U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1	U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8	U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8	U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8	U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1	U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1	U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1	U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1	U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1	U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1	U	1	5		1
10904	Ethylbenzene	100-41-4	0.8	U	0.8	5		1
10904	Freon 113	76-13-1	2	U	2	10		1
10904	Freon 133a	75-88-7	2	U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2	U	2	5		1
10904	2-Hexanone	591-78-6	3	U	3	10		1
10904	Isopropylbenzene	98-82-8	1	U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1	U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5	U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3	U	3	10		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10904	Methylene Chloride	75-09-2	2	U	2	5		1
10904	n-Propylbenzene	103-65-1	1	U	1	5		1
10904	Styrene	100-42-5	1	U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8	U	0.8	5		1
10904	Toluene	108-88-3	0.7	U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1	U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8	U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8	U	0.8	5		1
10904	Trichloroethene	79-01-6	1	U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2	U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1	U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5		1
10904	Vinyl Chloride	75-01-4	1	U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8	U	0.8	5		1
10904	o-Xylene	95-47-6	0.8	U	0.8	5		1
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
00527	1,4-Dioxane	123-91-1	0.5	U	0.5	2.0		1
GC/MS Semivolatiles	**EPA 1625C**		**ng/l**		**ng/l**	**ng/l**	**ng/l**	
10962	N-Nitrosodimethylamine	62-75-9	1.82		0.522	1.04		1
N-Nitrosodimethylamine was detected in the method blank at a concentration of 1.95 ng/l. The blank value was not subtracted from the analytical result. Sufficient sample was unavailable to repeat the analysis.								
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
04678	Aniline	62-53-3	1	U	1	5		1
04678	Benzidine	92-87-5	19	U	19	57		1
04678	Benzoic acid	65-85-0	6	U	6	14		1
04678	Benzyl alcohol	100-51-6	5	U	5	14		1
04678	4-Bromophenyl-phenylether	101-55-3	1	U	1	5		1
04678	Carbazole	86-74-8	1	U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1	U	1	5		1
04678	4-Chloroaniline	106-47-8	1	U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1	U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2	U	2	5		1
04678	2-Chlorophenol	95-57-8	1	U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2	U	2	5		1
04678	Dibenzofuran	132-64-9	1	U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l		ug/l	ug/l	ug/l	
04678	2,4-Dichlorophenol	120-83-2	1	U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3	U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3	U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	14		1
04678	2,4-Dinitrophenol	51-28-5	10	U	10	29		1
04678	2,4-Dinitrotoluene	121-14-2	1	U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1	U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1	U	1	5		1
04678	Hexachlorobenzene	118-74-1	1	U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1	U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5	U	5	14		1
04678	Hexachloroethane	67-72-1	1	U	1	5		1
04678	Isophorone	78-59-1	1	U	1	5		1
04678	2-Methylphenol	95-48-7	1	U	1	5		1
04678	4-Methylphenol	106-44-5	2	U	2	5		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1	U	1	5		1
04678	3-Nitroaniline	99-09-2	1	U	1	5		1
04678	4-Nitroaniline	100-01-6	1	U	1	5		1
04678	Nitrobenzene	98-95-3	1	U	1	5		1
04678	2-Nitrophenol	88-75-5	1	U	1	5		1
04678	4-Nitrophenol	100-02-7	10	U	10	29		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2	U	2	5		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04678	Pentachlorophenol	87-86-5	3	U	3	14		1
04678	Phenol	108-95-2	1	U	1	5		1
04678	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1	U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1	U	1	5		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l		ug/l	ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.010	U	0.010	0.052		1
10137	Acenaphthylene	208-96-8	0.010	U	0.010	0.052		1
10137	Anthracene	120-12-7	0.010	U	0.010	0.052		1
10137	Benzo(a)anthracene	56-55-3	0.010	U	0.010	0.052		1
10137	Benzo(a)pyrene	50-32-8	0.010	U	0.010	0.052		1
10137	Benzo(b)fluoranthene	205-99-2	0.010	U	0.010	0.052		1
10137	Benzo(g,h,i)perylene	191-24-2	0.010	U	0.010	0.052		1
10137	Benzo(k)fluoranthene	207-08-9	0.010	U	0.010	0.052		1
10137	Butylbenzylphthalate	85-68-7	0.065	J	0.052	1.0		1
10137	Di-n-butylphthalate	84-74-2	0.069	J	0.052	1.0		1
10137	Chrysene	218-01-9	0.010	U	0.010	0.052		1
10137	Dibenz(a,h)anthracene	53-70-3	0.010	U	0.010	0.052		1
10137	Diethylphthalate	84-66-2	0.052	U	0.052	1.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l		ug/l	ug/l	ug/l	
10137	Dimethylphthalate	131-11-3	0.052	U	0.052	1.0		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.22	J	0.052	1.0		1
10137	Fluoranthene	206-44-0	0.010	U	0.010	0.052		1
10137	Fluorene	86-73-7	0.010	U	0.010	0.052		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.010	U	0.010	0.052		1
10137	1-Methylnaphthalene	90-12-0	0.017	J	0.010	0.052		1
10137	2-Methylnaphthalene	91-57-6	0.022	J	0.010	0.052		1
10137	Naphthalene	91-20-3	0.29		0.010	0.052		1
10137	N-Nitrosodimethylamine	62-75-9	0.010	U	0.010	0.052		1
10137	Di-n-octylphthalate	117-84-0	0.087	J	0.052	1.0		1
10137	Phenanthrene	85-01-8	0.010	U	0.010	0.052		1
10137	Pyrene	129-00-0	0.010	U	0.010	0.052		1

The QC limits for n-nitrosodimethylamine and dimethylphthalate are advisory only until sufficient data points can be obtained to calculate statistical limits.

The following compounds were detected in the method blank at the respective concentrations of:
butylbenzylphthalate .056 ug/l
bis(2-ethylhexyl)phthalate .056 ug/l
di-n-octylphthalate .082 ug/l
These blank values were not subtracted from the analytical results.

GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20	U	20	50		1
Explosives	**SW-846 8330A**		ug/l		ug/l	ug/l	ug/l	
10131	4-Amino-2,6-Dinitrotoluene	19406-51-0	0.30	U	0.30	0.60	10000000	1
10131	2-Amino-4,6-Dinitrotoluene	35572-78-2	0.20	U	0.20	0.60	10000000	1
10131	2,6-Diamino-4-nitrotoluene	59229-75-3	0.20	U	0.20	0.60	10000000	1
10131	2,4-Diamino-6-nitrotoluene	6629-29-4	0.20	U	0.20	0.60	10000000	1
10131	1,3-Dinitrobenzene	99-65-0	0.20	U	0.20	0.60	10000000	1
10131	2,4-Dinitrotoluene	121-14-2	0.20	U	0.20	0.60	10000000	1
10131	2,6-Dinitrotoluene	606-20-2	0.20	U	0.20	0.60	10000000	1
10131	HMX	2691-41-0	0.65	U	0.65	2.0	10000000	1
10131	Nitrobenzene	98-95-3	0.20	U	0.20	0.60	10000000	1
10131	Nitroglycerin	55-63-0	5.2	U	5.2	15	10000000	1
10131	2-Nitrotoluene	88-72-2	0.20	U	0.20	0.60	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10131	3-Nitrotoluene	99-08-1	0.40	U	0.40	1.2	10000000	1
10131	4-Nitrotoluene	99-99-0	0.60	U	0.60	1.2	10000000	1
10131	PETN	78-11-5	6.0	U	6.0	18	10000000	1
10131	RDX	121-82-4	0.20	U	0.20	0.60	10000000	1
10131	Tetryl	479-45-8	0.40	U	0.40	0.60	10000000	1
10131	1,3,5-Trinitrobenzene	99-35-4	0.20	U	0.20	0.60	10000000	1
10131	2,4,6-Trinitrotoluene	118-96-7	0.20	U	0.20	0.60	10000000	1
Herbicides	**SW-846 8151A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10407	2,4-D	94-75-7	0.16	U	0.16	0.50		1
10407	Dalapon	75-99-0	0.25	U	0.25	1.2		1
10407	2,4-DB	94-82-6	0.30	U	0.30	1.0		1
10407	Dicamba	1918-00-9	0.080	U	0.080	0.30		1
10407	Dinoseb	88-85-7	0.10	U	0.10	0.50		1
10407	2,4-DP (Dichlorprop)	120-36-5	0.16	U	0.16	0.50		1
10407	MCPA	94-74-6	300	U	300	1,000		1
10407	MCPP	93-65-2	50	U	50	200		1
10407	2,4,5-T	93-76-5	0.015	U	0.015	0.050		1
10407	2,4,5-TP	93-72-1	0.010	U	0.010	0.050		1
HPLC Organics	**SW-846 8315A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
04144	17b Formaldehyde by 8315A	50-00-0	10	U	10	50		1
Pesticides/PCBs	**SW-846 8081A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
00177	Aldrin	309-00-2	0.0020	U	0.0020	0.010		1
00177	Alpha BHC	319-84-6	0.0030	U	0.0030	0.010		1
00177	Beta BHC	319-85-7	0.0040	U	0.0040	0.010		1
00177	Gamma BHC - Lindane	58-89-9	0.0020	U	0.0020	0.010		1
00177	Chlordane	57-74-9	0.12	U	0.12	0.50		1
00177	p,p-DDD	72-54-8	0.0050	U	0.0050	0.020		1
00177	p,p-DDE	72-55-9	0.0050	U	0.0050	0.020		1
00177	p,p-DDT	50-29-3	0.0050	U	0.0050	0.020		1
00177	Delta BHC	319-86-8	0.0029	U	0.0029	0.010		1
00177	Dieldrin	60-57-1	0.0053	U	0.0053	0.020		1
00177	Endosulfan I	959-98-8	0.0043	U	0.0043	0.010		1
00177	Endosulfan II	33213-65-9	0.015	U	0.015	0.020		1
00177	Endosulfan Sulfate	1031-07-8	0.0058	U	0.0058	0.020		1
00177	Endrin	72-20-8	0.0081	U	0.0081	0.020		1
00177	Endrin Aldehyde	7421-93-4	0.020	U	0.020	0.10		1
00177	Endrin Ketone	53494-70-5	0.0050	U	0.0050	0.020		1
00177	Heptachlor	76-44-8	0.0026	U	0.0026	0.010		1
00177	Heptachlor Epoxide	1024-57-3	0.0023	U	0.0023	0.010		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
00177	Methoxychlor	72-43-5	0.030	U	0.030	0.10		1
00177	Mirex	2385-85-5	0.084	U	0.084	0.25		1
00177	Toxaphene	8001-35-2	1.0	U	1.0	3.0		1
Pesticides/PCBs	**SW-846 8082**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10227	Aroclor 5432	63496-31-1	0.10	U	0.10	0.50		1
10227	Aroclor 5442	12642-23-8	0.10	U	0.10	0.50		1
10227	Aroclor 5460	11126-42-4	0.10	U	0.10	0.50		1
10227	PCB-1016	12674-11-2	0.10	U	0.10	0.50		1
10227	PCB-1221	11104-28-2	0.10	U	0.10	0.50		1
10227	PCB-1232	11141-16-5	0.20	U	0.20	0.50		1
10227	PCB-1242	53469-21-9	0.10	U	0.10	0.50		1
10227	PCB-1248	12672-29-6	0.10	U	0.10	0.50		1
10227	PCB-1254	11097-69-1	0.10	U	0.10	0.50		1
10227	PCB-1260	11096-82-5	0.10	U	0.10	0.50		1
10227	PCB-1262	37324-23-5	0.20	U	0.20	0.50		1
10227	PCB-1268	11100-14-4	0.16	U	0.16	0.50		1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.							
GC Extractable TPH	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.10	U	0.10	0.60		1
10365	EFH (C15-C20)	n.a.	0.10	U	0.10	0.60		1
10365	EFH (C21-C30)	n.a.	0.10	U	0.10	0.60		1
10365	EFH (C30 - C40)	n.a.	0.10	U	0.10	0.60		1
10365	EFH (C8-C11)	n.a.	0.10	U	0.10	0.60		1
GC Miscellaneous	**SW-846 8015B**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
06624	Ethanol	64-17-5	200	U	200	1,000		1
06624	Isopropanol	67-63-0	200	U	200	1,000		1
06624	Methanol	67-56-1	200	U	200	1,000		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	**mg/l**	
08278	Diethylene glycol	111-46-6	14	U	14	100		1
08278	Ethylene glycol	107-21-1	14	U	14	100		1
08278	Propylene glycol	57-55-6	10	U	10	100		1
	The sample was run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA holding time for this analysis. Reporting limits were raised due to interference from the sample matrix.							
Terphenyls	**SW-846 8015B**		**mg/l**		**mg/l**	**mg/l**	**mg/l**	
10319	m-Terphenyl	92-06-8	0.084	U	0.084	0.26		1
10319	o-Terphenyl	84-15-1	0.084	U	0.084	0.26		1
10319	p-Terphenyl	92-94-4	0.084	U	0.084	0.26		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.0834 U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138 U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702 U	0.0702	0.200		1
01754	Iron	7439-89-6	0.0522 U	0.0522	0.200		1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500		1
	SW-846 6020		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00038 U	0.00038	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000052 U	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020		1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
00368	11b Anions by 300.0 - Nitrate	14797-55-8	0.050 U	0.050	0.10		1
	EPA 314.0		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
	SW-846 7199		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1
	SW-846 9012B		**mg/l**	**mg/l**	**mg/l**	**mg/l**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

FB-06 SDG#: DE051-03FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9012B**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
08255	21b Cyanide by 9012B	57-12-5	0.0050 U	0.0050	0.010		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	Y103631AA	12/29/2010	04:41	Frank A Valla, Jr	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103562AB	12/28/2010	12:27	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E103562AB	12/28/2010	12:27	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y103631AA	12/29/2010	04:41	Frank A Valla, Jr	1
10962	19b NDMA by 1625C	EPA 1625C	1	10362WAA026	01/06/2011	06:49	Timothy J Trees	1
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	10362WAE026	01/20/2011	15:23	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10362WAC026	01/06/2011	13:42	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	10362WAE026	12/29/2010	00:30	Sherry L Morrow	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	10362WAC026	12/28/2010	16:15	Timothy J Attenberger	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	10362WAA026	12/28/2010	12:25	Wanda F Oswald	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	10363B20A	12/29/2010	20:35	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10363B20A	12/29/2010	20:35	Marie D John	1
10131	20b Energetics by 8330A	SW-846 8330A	1	103610006A	12/28/2010	19:06	Michele D Hamilton	1
04144	17b Formaldehyde by 8315A	SW-846 8315A	1	103560024A	12/23/2010	20:05	Michele D Hamilton	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	103620008A	12/31/2010	01:34	Michele D Hamilton	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	103570023A	01/14/2011	01:06	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	103570024A	01/06/2011	17:08	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	103570024A	12/26/2010	12:20	Karen L Beyer	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	103570023A	12/26/2010	12:20	Karen L Beyer	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	103620008A	12/28/2010	20:30	Elaine F Stoltzfus	1
01013	Formaldehyde Extraction	SW-846 8315A	1	103560024A	12/23/2010	15:00	Denise L Trimby	1
11122	Energetics Extraction	SW-846 8330	1	103610006A	12/27/2010	16:30	Wanda F Oswald	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

FB-06 SDG#: DE051-03FB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10365	9b TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620004A	12/30/2010 17:13	Heather E Williams	1
06624	25b Alcohols by 8015B	SW-846 8015B	1	103630029A	12/29/2010 21:34	Dustin A Underkoffler	1
08278	27b Glycols by 8015B	SW-846 8015B modified	1	103640032A	12/31/2010 17:03	Robert Brown	1
10319	26b Terphenyls by 8015B	SW-846 8015B	1	103620021A	01/04/2011 23:50	Heather E Williams	1
11203	Boeing EFH Waters Extraction	SW-846 3510C	1	103620004A	12/28/2010 16:15	Timothy J Attenberger	1
10304	Terphenyls water prep	SW-846 3510C	1	103620021A	12/29/2010 00:30	Sherry L Morrow	1
01743	Aluminum	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
08014	Boron	SW-846 6010B	1	103651848001	01/05/2011 18:39	John P Hook	1
01750	Calcium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
01754	Iron	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
01756	Lithium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
01757	Magnesium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
07058	Manganese	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
10143	Phosphorus	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
01762	Potassium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
01767	Sodium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
08068	Strontium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
07069	Tin	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
07070	Titanium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
10144	Zirconium	SW-846 6010B	1	103651848001	01/04/2011 18:07	John P Hook	1
06024	Antimony	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06026	Barium	SW-846 6020	1	103656050001D	01/06/2011 08:29	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06033	Copper	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06035	Lead	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	103656050001C	01/06/2011 08:29	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	103656050001B	01/06/2011 08:29	Choon Y Tian	1
06042	Silver	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06045	Thallium	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	103656050001A	01/06/2011 08:29	Choon Y Tian	1
00259	Mercury	SW-846 7470A	1	103575713005	12/28/2010 15:41	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	103651848001	01/04/2011 08:43	Denise K Conners	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	103656050001	01/04/2011 08:40	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	103575713005	12/23/2010 15:50	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	10356196903A	12/23/2010 16:31	Ashley M Adams	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: **FB06-SA5B-122210 Water**
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173162
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

FB-06 SDG#: DE051-03FB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00368	11b Anions by 300.0 - Nitrate	EPA 300.0	1	10356196903A	12/23/2010 16:31	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	10363658701A	12/29/2010 15:41	Ashley M Adams	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	10357113001A	12/23/2010 14:05	Nicole M Kepley	1
08255	21b Cyanide by 9012B	SW-846 9012B	1	10365117102A	12/31/2010 19:34	Joseph E McKenzie	1
08256	Cyanide Water Distillation	SW-846 9012B	1	10365117102A	12/31/2010 10:40	Carolyn M Mastropietro	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-010-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173163
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD010 SDG#: DE051-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U	200	610		1
04688	Benzidine	92-87-5	1,400	U	1,400	4,100		1
04688	Benzoic acid	65-85-0	200	U	200	610		1
04688	Benzyl alcohol	100-51-6	200	U	200	610		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200		1
04688	Carbazole	86-74-8	20	U	20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	41	U	41	200		1
04688	4-Chloroaniline	106-47-8	81	U	81	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200		1
04688	2-Chlorophenol	95-57-8	20	U	20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	41	U	41	200		1
04688	Dibenzofuran	132-64-9	20	U	20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	410		1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200		1
04688	2,4-Dimethylphenol	105-67-9	41	U	41	200		1
04688	3,5-Dimethylphenol	108-68-9	41	U	41	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	610		1
04688	2,4-Dinitrophenol	51-28-5	810	U	810	2,400		1
04688	2,4-Dinitrotoluene	121-14-2	41	U	41	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	130	J	20	410		1
04688	Hexachlorobenzene	118-74-1	20	U	20	200		1
04688	Hexachlorobutadiene	87-68-3	81	U	81	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	610		1
04688	Hexachloroethane	67-72-1	20	U	20	200		1
04688	Isophorone	78-59-1	20	U	20	200		1
04688	2-Methylphenol	95-48-7	41	U	41	200		1
04688	4-Methylphenol	106-44-5	41	U	41	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	20	U	20	200		1
04688	3-Nitroaniline	99-09-2	41	U	41	200		1
04688	4-Nitroaniline	100-01-6	81	U	81	200		1
04688	Nitrobenzene	98-95-3	20	U	20	200		1
04688	2-Nitrophenol	88-75-5	20	U	20	200		1
04688	4-Nitrophenol	100-02-7	200	U	200	610		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	200	U	200	610		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-010-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173163
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD010 SDG#: DE051-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	20	U	20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	41	U	41	200		1
04688	2,4,6-Trichlorophenol	88-06-2	41	U	41	200		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.81	U	0.81	2.0		1
10138	Acenaphthylene	208-96-8	0.41	U	0.41	2.0		1
10138	Anthracene	120-12-7	0.41	U	0.41	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.81	U	0.81	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.81	U	0.81	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	1.2	J	0.81	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.81	U	0.81	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.81	U	0.81	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.3	U	7.3	22		1
10138	Di-n-butylphthalate	84-74-2	7.3	U	7.3	22		1
10138	Chrysene	218-01-9	1.1	J	0.41	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.81	U	0.81	2.0		1
10138	Diethylphthalate	84-66-2	7.3	U	7.3	22		1
10138	Dimethylphthalate	131-11-3	7.3	U	7.3	22		1
10138	Fluoranthene	206-44-0	1.1	J	0.81	2.0		1
10138	Fluorene	86-73-7	0.81	U	0.81	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.81	U	0.81	2.0		1
10138	1-Methylnaphthalene	90-12-0	0.81	U	0.81	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.81	U	0.81	2.0		1
10138	Naphthalene	91-20-3	1.0	J	0.81	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.81	U	0.81	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.3	U	7.3	22		1
10138	Phenanthrene	85-01-8	1.8	J	0.81	2.0		1
10138	Pyrene	129-00-0	1.0	J	0.81	2.0		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.5	U	1.5	4.4		1
10401	Dalapon	75-99-0	5.4	U	5.4	11		1
10401	2,4-DB	94-82-6	0.76	U	0.76	2.1		1
10401	Dicamba	1918-00-9	0.74	U	0.74	0.74		1
10401	Dinoseb	88-85-7	0.98	U	0.98	2.9		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.98	U	0.98	2.1		1
10401	MCPA	94-74-6	290	U	290	310		1
10401	MCPP (Mecoprop)	93-65-2	92	U	92	310		1
10401	2,4,5-T	93-76-5	0.10	U	0.10	0.21		1
10401	2,4,5-TP	93-72-1	0.092	U	0.092	0.21		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-010-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173163
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD010 SDG#: DE051-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	compounds were affected: MCPA.							
	Due to interfering peaks on the chromatogram, the values reported for dicamba represent the lowest reporting limits attainable.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.081	U	0.081	0.20		1
01363	Alpha BHC	319-84-6	0.042	U	0.042	0.20		1
01363	Beta BHC	319-85-7	0.073	U	0.073	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.042	U	0.042	0.20		1
01363	Chlordane	57-74-9	3.7	U	3.7	4.2		1
01363	p,p-DDD	72-54-8	0.22	U	0.22	0.42		1
01363	p,p-DDE	72-55-9	1.1		0.081	0.42		1
01363	p,p-DDT	50-29-3	0.90	U	0.90	0.90		1
01363	Delta BHC	319-86-8	0.11	U	0.11	0.20		1
01363	Dieldrin	60-57-1	0.31	U	0.31	0.42		1
01363	Endosulfan I	959-98-8	0.21	U	0.21	0.21		1
01363	Endosulfan II	33213-65-9	0.44	U	0.44	0.44		1
01363	Endosulfan Sulfate	1031-07-8	0.61	U	0.61	0.61		1
01363	Endrin	72-20-8	0.081	U	0.081	0.42		1
01363	Endrin Aldehyde	7421-93-4	0.33	U	0.33	0.42		1
01363	Endrin Ketone	53494-70-5	0.30	U	0.30	0.42		1
01363	Heptachlor	76-44-8	0.073	U	0.073	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.067	U	0.067	0.20		1
01363	Methoxychlor	72-43-5	1.3	U	1.3	2.0		1
01363	Mirex	2385-85-5	0.50	U	0.50	0.50		1
01363	Toxaphene	8001-35-2	2.7	U	2.7	8.1		1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	4.0		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	4.0		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	4.0		1
10225	PCB-1016	12674-11-2	0.40	U	0.40	2.1		1
10225	PCB-1221	11104-28-2	0.61	U	0.61	2.1		1
10225	PCB-1232	11141-16-5	0.63	U	0.63	2.1		1
10225	PCB-1242	53469-21-9	0.61	U	0.61	2.1		1
10225	PCB-1248	12672-29-6	0.40	U	0.40	2.1		1
10225	PCB-1254	11097-69-1	2.0	J	0.40	2.1		1
10225	PCB-1260	11096-82-5	1.2	J	0.40	2.1		1
10225	PCB-1262	37324-23-5	0.40	U	0.40	2.1		1
10225	PCB-1268	11100-14-4	0.40	U	0.40	2.1		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	8,910		5.96	23.7		1
07914	Boron	7440-42-8	6.51		1.06	5.93		1
01650	Calcium	7440-70-2	4,260		7.27	23.7		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-010-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173163
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD010 SDG#: DE051-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01654	Iron	7439-89-6	15,400		5.58	23.7		1
01656	Lithium	7439-93-2	23.2		0.26	2.4		1
01657	Magnesium	7439-95-4	3,720		3.01	11.9		1
06958	Manganese	7439-96-5	301		0.0925	0.593		1
10145	Phosphorus	7723-14-0	378		0.664	11.9		1
01662	Potassium	7440-09-7	2,890		21.3	59.3		1
01667	Sodium	7440-23-5	56.7	J	44.2	119		1
07968	Strontium	7440-24-6	13.2		0.0735	0.593		1
06969	Tin	7440-31-5	2.40	J	1.19	11.9		1
06970	Titanium	7440-32-6	873		0.450	1.19		1
10146	Zirconium	7440-67-7	0.996	U	0.996	5.93		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0698	U	0.0698	0.233		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.04		0.0698	0.465		2
06126	Barium	7440-39-3	72.5		0.126	0.465		2
06127	Beryllium	7440-41-7	0.407		0.0186	0.116		2
06128	Cadmium	7440-43-9	0.152		0.0419	0.116		2
06131	Chromium	7440-47-3	11.8		0.140	0.465		2
06132	Cobalt	7440-48-4	4.17		0.0233	0.116		2
06133	Copper	7440-50-8	5.42		0.0775	0.470		2
06135	Lead	7439-92-1	8.58		0.0121	0.233		2
06138	Molybdenum	7439-98-7	0.276		0.0581	0.116		2
06139	Nickel	7440-02-0	8.35		0.116	0.465		2
06141	Selenium	7782-49-2	0.137	J	0.0465	0.465		2
06142	Silver	7440-22-4	0.0232	J	0.0140	0.116		2
06145	Thallium	7440-28-0	0.247		0.0349	0.116		2
06148	Vanadium	7440-62-2	23.9		0.0258	0.117		2
06149	Zinc	7440-66-6	58.0		0.651	3.49		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0093	J	0.0035	0.122		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4		0.98	1.2		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.0	U	11.0	36.6		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.24	U	0.24	1.2		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	434		10.0	10.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-010-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173163
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD010 SDG#: DE051-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.98	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	18.1	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 02:50	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 12:52	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 05:20	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 18:22	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 06:11	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-010-SIV-SD-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173163
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD010 SDG#: DE051-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:09	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 13:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:30	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 13:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 13:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:30	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 13:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:21	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 12:25	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 21:19	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 19:34	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173164
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL101 SDG#: DE051-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	200	U	200	590		1
04688	Benzidine	92-87-5	1,400	U	1,400	3,900		1
04688	Benzoic acid	65-85-0	200	U	200	590		1
04688	Benzyl alcohol	100-51-6	200	U	200	590		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200		1
04688	Carbazole	86-74-8	20	U	20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	200		1
04688	4-Chloroaniline	106-47-8	79	U	79	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200		1
04688	2-Chlorophenol	95-57-8	20	U	20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	200		1
04688	Dibenzofuran	132-64-9	20	U	20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390		1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200		1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	200		1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	590		1
04688	2,4-Dinitrophenol	51-28-5	790	U	790	2,400		1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	58	J	20	390		1
04688	Hexachlorobenzene	118-74-1	20	U	20	200		1
04688	Hexachlorobutadiene	87-68-3	79	U	79	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	590		1
04688	Hexachloroethane	67-72-1	20	U	20	200		1
04688	Isophorone	78-59-1	20	U	20	200		1
04688	2-Methylphenol	95-48-7	39	U	39	200		1
04688	4-Methylphenol	106-44-5	39	U	39	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	20	U	20	200		1
04688	3-Nitroaniline	99-09-2	39	U	39	200		1
04688	4-Nitroaniline	100-01-6	79	U	79	200		1
04688	Nitrobenzene	98-95-3	20	U	20	200		1
04688	2-Nitrophenol	88-75-5	20	U	20	200		1
04688	4-Nitrophenol	100-02-7	200	U	200	590		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	200	U	200	590		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173164
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL101 SDG#: DE051-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	20	U	20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	200		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	200		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.79	U	0.79	2.0		1
10138	Acenaphthylene	208-96-8	0.39	U	0.39	2.0		1
10138	Anthracene	120-12-7	0.39	U	0.39	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.79	U	0.79	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.79	U	0.79	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	0.81	J	0.79	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	0.79	U	0.79	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.79	U	0.79	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.1	U	7.1	21		1
10138	Di-n-butylphthalate	84-74-2	7.1	U	7.1	21		1
10138	Chrysene	218-01-9	0.67	J	0.39	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.79	U	0.79	2.0		1
10138	Diethylphthalate	84-66-2	7.1	U	7.1	21		1
10138	Dimethylphthalate	131-11-3	7.1	U	7.1	21		1
10138	Fluoranthene	206-44-0	1.6	J	0.79	2.0		1
10138	Fluorene	86-73-7	0.79	U	0.79	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.79	U	0.79	2.0		1
10138	1-Methylnaphthalene	90-12-0	0.79	U	0.79	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.79	U	0.79	2.0		1
10138	Naphthalene	91-20-3	0.91	J	0.79	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.79	U	0.79	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.1	U	7.1	21		1
10138	Phenanthrene	85-01-8	1.6	J	0.79	2.0		1
10138	Pyrene	129-00-0	1.2	J	0.79	2.0		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.2		1
10401	Dalapon	75-99-0	5.2	U	5.2	11		1
10401	2,4-DB	94-82-6	0.73	U	0.73	2.0		1
10401	Dicamba	1918-00-9	0.47	U	0.47	1.4		1
10401	Dinoseb	88-85-7	0.94	U	0.94	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.94	U	0.94	2.0		1
10401	MCPA	94-74-6	180	J	90	290		1
10401	MCPP (Mecoprop)	93-65-2	88	U	88	290		1
10401	2,4,5-T	93-76-5	0.097	U	0.097	0.20		1
10401	2,4,5-TP	93-72-1	0.088	U	0.088	0.20		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.

Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.5	U	2.5	5.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173164
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL101 SDG#: DE051-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.078	U	0.078	0.20		1
01363	Alpha BHC	319-84-6	0.040	U	0.040	0.20		1
01363	Beta BHC	319-85-7	0.071	U	0.071	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.040	U	0.040	0.20		1
01363	Chlordane	57-74-9	0.94	U	0.94	4.0		1
01363	p,p-DDD	72-54-8	0.078	U	0.078	0.40		1
01363	p,p-DDE	72-55-9	0.078	U	0.078	0.40		1
01363	p,p-DDT	50-29-3	0.078	U	0.078	0.40		1
01363	Delta BHC	319-86-8	0.042	U	0.042	0.20		1
01363	Dieldrin	60-57-1	0.078	U	0.078	0.40		1
01363	Endosulfan I	959-98-8	0.052	U	0.052	0.20		1
01363	Endosulfan II	33213-65-9	0.078	U	0.078	0.40		1
01363	Endosulfan Sulfate	1031-07-8	0.20	J	0.078	0.40		1
01363	Endrin	72-20-8	0.078	U	0.078	0.40		1
01363	Endrin Aldehyde	7421-93-4	0.078	U	0.078	0.40		1
01363	Endrin Ketone	53494-70-5	0.078	U	0.078	0.40		1
01363	Heptachlor	76-44-8	0.071	U	0.071	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.040	U	0.040	0.20		1
01363	Methoxychlor	72-43-5	0.40	U	0.40	2.0		1
01363	Mirex	2385-85-5	0.078	U	0.078	0.40		1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.8		1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.9		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.9		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.9		1
10225	PCB-1016	12674-11-2	0.39	U	0.39	2.0		1
10225	PCB-1221	11104-28-2	0.59	U	0.59	2.0		1
10225	PCB-1232	11141-16-5	0.61	U	0.61	2.0		1
10225	PCB-1242	53469-21-9	0.59	U	0.59	2.0		1
10225	PCB-1248	12672-29-6	0.39	U	0.39	2.0		1
10225	PCB-1254	11097-69-1	0.39	U	0.39	2.0		1
10225	PCB-1260	11096-82-5	0.39	U	0.39	2.0		1
10225	PCB-1262	37324-23-5	0.39	U	0.39	2.0		1
10225	PCB-1268	11100-14-4	0.39	U	0.39	2.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,700		5.70	22.7		1
07914	Boron	7440-42-8	5.41	J	1.01	5.66		1
01650	Calcium	7440-70-2	3,030		6.94	22.7		1
01654	Iron	7439-89-6	25,400		5.33	22.7		1
01656	Lithium	7439-93-2	23.4		0.25	2.3		1
01657	Magnesium	7439-95-4	4,660		2.88	11.3		1
06958	Manganese	7439-96-5	547		0.0883	0.566		1
10145	Phosphorus	7723-14-0	256		0.634	11.3		1
01662	Potassium	7440-09-7	3,240		20.4	56.6		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173164
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL101 SDG#: DE051-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01667	Sodium	7440-23-5	162		42.2	113		1
07968	Strontium	7440-24-6	28.5		0.0702	0.566		1
06969	Tin	7440-31-5	2.50	J	1.13	11.3		1
06970	Titanium	7440-32-6	1,330		0.430	1.13		1
10146	Zirconium	7440-67-7	2.40	J	0.951	5.66		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0982	J	0.0680	0.227		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.58		0.0680	0.453		2
06126	Barium	7440-39-3	196		0.306	1.13		5
06127	Beryllium	7440-41-7	0.947		0.0181	0.113		2
06128	Cadmium	7440-43-9	0.485		0.0408	0.113		2
06131	Chromium	7440-47-3	25.8		0.136	0.453		2
06132	Cobalt	7440-48-4	13.3		0.0227	0.113		2
06133	Copper	7440-50-8	13.2		0.0770	0.466		2
06135	Lead	7439-92-1	10.5		0.0118	0.227		2
06138	Molybdenum	7439-98-7	0.888		0.0566	0.113		2
06139	Nickel	7440-02-0	21.2		0.113	0.453		2
06141	Selenium	7782-49-2	0.210	J	0.0453	0.453		2
06142	Silver	7440-22-4	0.0532	J	0.0136	0.113		2
06145	Thallium	7440-28-0	0.434		0.0340	0.113		2
06148	Vanadium	7440-62-2	46.6		0.0257	0.117		2
06149	Zinc	7440-66-6	74.8		0.634	3.40		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0031	U	0.0031	0.109		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.1		0.94	1.2		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.6	U	10.6	35.3		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	1.3		0.24	1.2		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	478		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.08		0.0100	0.0100		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173164
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL101 SDG#: DE051-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	15.1	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 03:25	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 13:24	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 05:48	John W Perkins	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	110040016A	01/05/2011 16:38	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 18:37	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 06:30	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	110040016A	01/05/2011 09:45	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173164
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL101 SDG#: DE051-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:13	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/11/2011 13:19	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:35	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:02	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:02	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:35	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:02	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:23	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 12:40	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 21:42	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 19:46	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182102B	12/27/2010 12:00	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039402B	12/27/2010 12:00	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.0	U	7.0	8.4		0.84
06192	Benzene	71-43-2	0.10	U	0.10	4.2		0.84
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.2		0.84
06192	Bromochloromethane	74-97-5	0.34	U	0.34	4.2		0.84
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.2		0.84
06192	Bromoform	75-25-2	0.42	U	0.42	4.2		0.84
06192	Bromomethane	74-83-9	0.26	U	0.26	4.2		0.84
06192	2-Butanone	78-93-3	1.3	U	1.3	8.4		0.84
06192	n-Butylbenzene	104-51-8	0.13	U	0.13	4.2		0.84
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.2		0.84
06192	tert-Butylbenzene	98-06-6	0.17	U	0.17	4.2		0.84
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.2		0.84
06192	Chlorobenzene	108-90-7	0.12	U	0.12	4.2		0.84
06192	Chloroethane	75-00-3	0.14	U	0.14	4.2		0.84
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31	U	0.31	4.2		0.84
06192	Chloroform	67-66-3	0.13	U	0.13	4.2		0.84
06192	Chloromethane	74-87-3	0.34	U	0.34	4.2		0.84
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.2		0.84
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.2		0.84
06192	Chlorotrifluoroethene	79-38-9	0.52	U	0.52	5.2		0.84
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.73	U	0.73	4.2		0.84
06192	Dibromochloromethane	124-48-1	0.21	U	0.21	4.2		0.84
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.2		0.84
06192	Dibromomethane	74-95-3	0.25	U	0.25	4.2		0.84
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.2		0.84
06192	1,3-Dichlorobenzene	541-73-1	0.13	U	0.13	4.2		0.84
06192	1,4-Dichlorobenzene	106-46-7	0.17	U	0.17	4.2		0.84
06192	Dichlorodifluoromethane	75-71-8	0.13	U	0.13	4.2		0.84
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.2		0.84
06192	1,2-Dichloroethane	107-06-2	0.16	U	0.16	4.2		0.84
06192	1,1-Dichloroethene	75-35-4	0.41	U	0.41	4.2		0.84
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.2		0.84
06192	trans-1,2-Dichloroethene	156-60-5	0.13	U	0.13	4.2		0.84
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.2		0.84
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.2		0.84
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.2		0.84
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.2		0.84
06192	cis-1,3-Dichloropropene	10061-01-5	0.17	U	0.17	4.2		0.84
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.2		0.84
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.2		0.84
06192	Freon 113	76-13-1	0.12	U	0.12	4.2		0.84
06192	Freon 133a	75-88-7	0.52	U	0.52	5.2		0.84
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.2		0.84
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.4		0.84
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.2		0.84
06192	p-Isopropyltoluene	99-87-6	0.12	U	0.12	4.2		0.84
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22	U	0.22	4.2		0.84
06192	4-Methyl-2-pentanone	108-10-1	0.41	U	0.41	8.4		0.84
06192	Methylene Chloride	75-09-2	0.44	J	0.25	4.2		0.84
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.2		0.84

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.10	U	0.10	4.2		0.84
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12	U	0.12	4.2		0.84
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24	U	0.24	4.2		0.84
06192	Tetrachloroethene	127-18-4	0.21	U	0.21	4.2		0.84
06192	Toluene	108-88-3	0.15	J	0.08	4.2		0.84
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.2		0.84
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.2		0.84
06192	1,1,1-Trichloroethane	71-55-6	0.21	U	0.21	4.2		0.84
06192	1,1,2-Trichloroethane	79-00-5	0.28	U	0.28	4.2		0.84
06192	Trichloroethene	79-01-6	0.16	U	0.16	4.2		0.84
06192	Trichlorofluoromethane	75-69-4	0.30	U	0.30	4.2		0.84
06192	1,2,3-Trichloropropane	96-18-4	0.34	U	0.34	4.2		0.84
06192	1,2,4-Trimethylbenzene	95-63-6	0.42	U	0.42	4.2		0.84
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.2		0.84
06192	Vinyl Chloride	75-01-4	0.21	U	0.21	4.2		0.84
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.2		0.84
06192	o-Xylene	95-47-6	0.18	U	0.18	4.2		0.84
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.3	U	5.3	16		21.55
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	369		103	207		5
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	210	U	210	620		1
04688	Benzidine	92-87-5	1,400	U	1,400	4,100		1
04688	Benzoic acid	65-85-0	210	U	210	620		1
04688	Benzyl alcohol	100-51-6	210	U	210	620		1
04688	4-Bromophenyl-phenylether	101-55-3	21	U	21	210		1
04688	Carbazole	86-74-8	21	U	21	210		1
04688	4-Chloro-3-methylphenol	59-50-7	41	U	41	210		1
04688	4-Chloroaniline	106-47-8	83	U	83	210		1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U	21	210		1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U	21	210		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U	21	210		1
04688	2-Chloronaphthalene	91-58-7	21	U	21	210		1
04688	2-Chlorophenol	95-57-8	21	U	21	210		1
04688	4-Chlorophenyl-phenylether	7005-72-3	41	U	41	210		1
04688	Dibenzofuran	132-64-9	21	U	21	210		1
04688	1,2-Dichlorobenzene	95-50-1	21	U	21	210		1
04688	1,3-Dichlorobenzene	541-73-1	21	U	21	210		1
04688	1,4-Dichlorobenzene	106-46-7	21	U	21	210		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	410		1
04688	2,4-Dichlorophenol	120-83-2	21	U	21	210		1
04688	2,4-Dimethylphenol	105-67-9	41	U	41	210		1
04688	3,5-Dimethylphenol	108-68-9	41	U	41	210		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U	210	620		1
04688	2,4-Dinitrophenol	51-28-5	830	U	830	2,500		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrotoluene	121-14-2	41	U	41	210		1
04688	2,6-Dinitrotoluene	606-20-2	21	U	21	210		1
04688	1,2-Diphenylhydrazine	122-66-7	21	U	21	210		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	22	J	21	410		1
04688	Hexachlorobenzene	118-74-1	21	U	21	210		1
04688	Hexachlorobutadiene	87-68-3	83	U	83	210		1
04688	Hexachlorocyclopentadiene	77-47-4	210	U	210	620		1
04688	Hexachloroethane	67-72-1	21	U	21	210		1
04688	Isophorone	78-59-1	21	U	21	210		1
04688	2-Methylphenol	95-48-7	41	U	41	210		1
04688	4-Methylphenol	106-44-5	41	U	41	210		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	21	U	21	210		1
04688	3-Nitroaniline	99-09-2	41	U	41	210		1
04688	4-Nitroaniline	100-01-6	83	U	83	210		1
04688	Nitrobenzene	98-95-3	21	U	21	210		1
04688	2-Nitrophenol	88-75-5	21	U	21	210		1
04688	4-Nitrophenol	100-02-7	210	U	210	620		1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U	21	210		1
04688	N-Nitrosodiphenylamine	86-30-6	21	U	21	210		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	210	U	210	620		1
04688	Phenol	108-95-2	21	U	21	210		1
04688	1,2,4-Trichlorobenzene	120-82-1	21	U	21	210		1
04688	2,4,5-Trichlorophenol	95-95-4	41	U	41	210		1
04688	2,4,6-Trichlorophenol	88-06-2	41	U	41	210		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	4.8		0.83	2.1		1
10138	Acenaphthylene	208-96-8	0.41	U	0.41	2.1		1
10138	Anthracene	120-12-7	6.5		0.41	2.1		1
10138	Benzo(a)anthracene	56-55-3	13		0.83	2.1		1
10138	Benzo(a)pyrene	50-32-8	11		0.83	2.1		1
10138	Benzo(b)fluoranthene	205-99-2	13		0.83	2.1		1
10138	Benzo(g,h,i)perylene	191-24-2	2.7		0.83	2.1		1
10138	Benzo(k)fluoranthene	207-08-9	8.2		0.83	2.1		1
10138	Butylbenzylphthalate	85-68-7	7.4	U	7.4	22		1
10138	Di-n-butylphthalate	84-74-2	8.4	J	7.4	22		1
10138	Chrysene	218-01-9	14		0.41	2.1		1
10138	Dibenz(a,h)anthracene	53-70-3	0.98	J	0.83	2.1		1
10138	Diethylphthalate	84-66-2	11	J	7.4	22		1
10138	Dimethylphthalate	131-11-3	7.4	U	7.4	22		1
10138	Fluoranthene	206-44-0	28		0.83	2.1		1
10138	Fluorene	86-73-7	3.3		0.83	2.1		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.1		0.83	2.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.83	U	0.83	2.1		1
10138	2-Methylnaphthalene	91-57-6	0.95	J	0.83	2.1		1
10138	Naphthalene	91-20-3	2.1	J	0.83	2.1		1
10138	N-Nitrosodimethylamine	62-75-9	0.83	U	0.83	2.1		1
10138	Di-n-octylphthalate	117-84-0	7.4	U	7.4	22		1
10138	Phenanthrene	85-01-8	27		0.83	2.1		1
10138	Pyrene	129-00-0	25		0.83	2.1		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.0		20.7
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	93	U	93	190	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	62	U	62	190	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U	120	370	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U	120	370	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	62	U	62	190	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	62	U	62	190	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	62	U	62	190	10000000	1
10132	HMX	2691-41-0	190	U	190	470	10000000	1
10132	Nitrobenzene	98-95-3	62	U	62	190	10000000	1
10132	Nitroglycerin	55-63-0	1,200	U	1,200	3,700	10000000	1
10132	2-Nitrotoluene	88-72-2	120	U	120	190	10000000	1
10132	3-Nitrotoluene	99-08-1	160	U	160	190	10000000	1
10132	4-Nitrotoluene	99-99-0	120	U	120	190	10000000	1
10132	PETN	78-11-5	1,200	U	1,200	3,700	10000000	1
10132	RDX	121-82-4	78	U	78	190	10000000	1
10132	Tetryl	479-45-8	95	U	95	190	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	62	U	62	190	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	62	U	62	190	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.5	U	1.5	4.5		1
10401	Dalapon	75-99-0	5.5	U	5.5	11		1
10401	2,4-DB	94-82-6	1.1	U	1.1	2.1		1
10401	Dicamba	1918-00-9	3.1		0.50	1.5		1
10401	Dinoseb	88-85-7	0.99	U	0.99	3.0		1
10401	2,4-DP (Dichlorprop)	120-36-5	2.0	J	0.99	2.1		1
10401	MCPA	94-74-6	240	J	94	310		1
10401	MCPP (Mecoprop)	93-65-2	93	U	93	310		1
10401	2,4,5-T	93-76-5	0.10	U	0.10	0.21		1
10401	2,4,5-TP	93-72-1	0.36	U	0.36	0.36		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for 2,4-DB.
Due to interfering peaks on the chromatogram, the values reported for 2,4,5-TP and 2,4-DB represent the lowest reporting limits attainable.

HPLC Organics	**SW-846 8315A**		ug/kg		ug/kg	ug/kg	ug/kg	
04173	17a Formaldehyde by 8315A	50-00-0	740	U	740	1,900		1
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.082	U	0.082	0.21		1
01363	Alpha BHC	319-84-6	0.042	U	0.042	0.21		1
01363	Beta BHC	319-85-7	0.074	U	0.074	0.21		1
01363	Gamma BHC - Lindane	58-89-9	0.042	U	0.042	0.21		1
01363	Chlordane	57-74-9	0.99	U	0.99	4.2		1
01363	p,p-DDD	72-54-8	0.082	U	0.082	0.42		1
01363	p,p-DDE	72-55-9	0.082	U	0.082	0.42		1
01363	p,p-DDT	50-29-3	0.10	J	0.082	0.42		1
01363	Delta BHC	319-86-8	0.045	U	0.045	0.21		1
01363	Dieldrin	60-57-1	0.082	U	0.082	0.42		1
01363	Endosulfan I	959-98-8	0.055	U	0.055	0.21		1
01363	Endosulfan II	33213-65-9	0.082	U	0.082	0.42		1
01363	Endosulfan Sulfate	1031-07-8	0.082	U	0.082	0.42		1
01363	Endrin	72-20-8	0.082	U	0.082	0.42		1
01363	Endrin Aldehyde	7421-93-4	0.082	U	0.082	0.42		1
01363	Endrin Ketone	53494-70-5	0.082	U	0.082	0.42		1
01363	Heptachlor	76-44-8	0.074	U	0.074	0.21		1
01363	Heptachlor Epoxide	1024-57-3	0.042	U	0.042	0.21		1
01363	Methoxychlor	72-43-5	0.42	U	0.42	2.1		1
01363	Mirex	2385-85-5	0.13	J	0.082	0.42		1
01363	Toxaphene	8001-35-2	2.7	U	2.7	8.2		1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	4.1		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	4.1		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	4.1		1
10225	PCB-1016	12674-11-2	0.41	U	0.41	2.1		1
10225	PCB-1221	11104-28-2	0.62	U	0.62	2.1		1
10225	PCB-1232	11141-16-5	0.65	U	0.65	2.1		1
10225	PCB-1242	53469-21-9	0.62	U	0.62	2.1		1
10225	PCB-1248	12672-29-6	0.41	U	0.41	2.1		1
10225	PCB-1254	11097-69-1	0.41	U	0.41	2.1		1
10225	PCB-1260	11096-82-5	0.41	U	0.41	2.1		1
10225	PCB-1262	37324-23-5	0.41	U	0.41	2.1		1
10225	PCB-1268	11100-14-4	0.41	U	0.41	2.1		1
GC Extractable TPH	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	0.50	U	0.50	1.5		1
10199	EFH (C15-C20)	n.a.	0.72	J	0.50	1.5		1
10199	EFH (C21-C30)	n.a.	8.7		0.50	1.5		1
10199	EFH (C30 - C40)	n.a.	40		0.50	1.5		1
10199	EFH (C8-C11)	n.a.	0.50	U	0.50	1.5		1
GC Miscellaneous	**SW-846 8015B**		ug/kg		ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120	U	120	620		1
10501	Isopropanol	67-63-0	120	U	120	620		1
10501	Methanol	67-56-1	120	U	120	620		1
GC Miscellaneous	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	6.2	U	6.2	16		1
08283	Ethylene glycol	107-21-1	6.2	U	6.2	16		1
08283	Propylene glycol	57-55-6	6.2	U	6.2	16		1
Terphenyls	**SW-846 8015B**		mg/kg		mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.9	U	1.9	4.3		1
10318	o-Terphenyl	84-15-1	1.9	U	1.9	4.3		1
10318	p-Terphenyl	92-94-4	1.9	U	1.9	4.3		1
Metals	**SW-846 6010B**		mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	25,200		6.18	24.6		1
07914	Boron	7440-42-8	11.4		1.09	6.14		1
01650	Calcium	7440-70-2	71,800		37.7	123		5
01654	Iron	7439-89-6	28,500		5.79	24.6		1
01656	Lithium	7439-93-2	24.2		0.27	2.5		1
01657	Magnesium	7439-95-4	7,560		3.12	12.3		1
06958	Manganese	7439-96-5	357		0.0958	0.614		1
10145	Phosphorus	7723-14-0	640		0.688	12.3		1
01662	Potassium	7440-09-7	5,740		22.1	61.4		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01667	Sodium	7440-23-5	129		45.8	123		1
07968	Strontium	7440-24-6	114		0.0762	0.614		1
06969	Tin	7440-31-5	2.05	J	1.23	12.3		1
06970	Titanium	7440-32-6	1,240		0.467	1.23		1
10146	Zirconium	7440-67-7	2.97	J	1.03	6.14		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.189	J	0.0744	0.248		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.75		0.0744	0.496		2
06126	Barium	7440-39-3	115		0.134	0.496		2
06127	Beryllium	7440-41-7	0.723		0.0199	0.124		2
06128	Cadmium	7440-43-9	0.360		0.0447	0.124		2
06131	Chromium	7440-47-3	31.5		0.149	0.496		2
06132	Cobalt	7440-48-4	8.52		0.0248	0.124		2
06133	Copper	7440-50-8	13.6		0.0819	0.496		2
06135	Lead	7439-92-1	9.53		0.0129	0.248		2
06138	Molybdenum	7439-98-7	0.527		0.0620	0.124		2
06139	Nickel	7440-02-0	18.0		0.124	0.496		2
06141	Selenium	7782-49-2	0.296	J	0.0496	0.496		2
06142	Silver	7440-22-4	0.0309	J	0.0149	0.124		2
06145	Thallium	7440-28-0	0.344		0.0372	0.124		2
06148	Vanadium	7440-62-2	60.6		0.0273	0.124		2
06149	Zinc	7440-66-6	77.6		0.695	3.72		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0034	U	0.0034	0.120		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.9		0.99	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.99	U	0.99	1.9		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.2	U	11.2	37.2		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.33	J	0.25	1.2		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.22	U	0.22	0.62		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	440		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL117 SDG#: DE051-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		Std. Units	Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	8.19	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	28a Moisture Content by 160.3	n.a.	19.4	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103621AA	12/28/2010	16:24	Chelsea B Eastep	0.84
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103631AA	12/29/2010	10:11	Jason M Long	21.55
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010	17:18	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035723411	12/23/2010	17:55	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035723411	12/23/2010	17:55	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035723411	12/23/2010	17:15	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/20/2011	15:38	Timothy J Trees	5
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011	03:59	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011	13:55	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010	10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011	18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010	06:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10357A34B	12/27/2010	19:05	Carrie E Miller	20.7
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010	17:14	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103650008A	01/06/2011	03:49	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103610005A	12/29/2010	19:08	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011	06:15	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011	18:51	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011	06:48	Lindsey K Lafferty	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL117 SDG#: DE051-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103610005A	12/27/2010 15:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103650008A	01/03/2011 16:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 18:56	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103630030A	12/29/2010 22:48	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103630032A	12/29/2010 20:41	Robert Brown	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103640012A	01/05/2011 08:05	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103640012A	12/31/2010 00:30	David V Hershey Jr	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103630032A	12/29/2010 17:00	Tyler O Griffin	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103630030A	12/29/2010 17:00	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
01650	Calcium	SW-846 6010B	2	103645708002	12/31/2010 17:18	John P Hook	5
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:17	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:05	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06133	Copper	SW-846 6020	2	110101026002A	01/12/2011 09:37	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:05	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:05	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173165
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL117 SDG#: DE051-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:37	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:05	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:24	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201A	01/14/2011 12:54	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11013013201A	01/14/2011 12:54	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203A	01/14/2011 22:05	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 19:59	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	11004102201A	01/04/2011 19:04	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201A	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203A	01/13/2011 23:45	Venia B McFadden	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11004102201A	01/04/2011 09:15	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.8	U	6.8	8.1		0.86
06192	Benzene	71-43-2	0.10	U	0.10	4.0		0.86
06192	Bromobenzene	108-86-1	0.13	U	0.13	4.0		0.86
06192	Bromochloromethane	74-97-5	0.33	U	0.33	4.0		0.86
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.0		0.86
06192	Bromoform	75-25-2	0.40	U	0.40	4.0		0.86
06192	Bromomethane	74-83-9	0.25	U	0.25	4.0		0.86
06192	2-Butanone	78-93-3	1.2	U	1.2	8.1		0.86
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.0		0.86
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.0		0.86
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	4.0		0.86
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	4.0		0.86
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.0		0.86
06192	Chloroethane	75-00-3	0.13	U	0.13	4.0		0.86
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30	U	0.30	4.0		0.86
06192	Chloroform	67-66-3	0.12	U	0.12	4.0		0.86
06192	Chloromethane	74-87-3	0.33	U	0.33	4.0		0.86
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	4.0		0.86
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	4.0		0.86
06192	Chlorotrifluoroethene	79-38-9	0.51	U	0.51	5.1		0.86
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.71	U	0.71	4.0		0.86
06192	Dibromochloromethane	124-48-1	0.20	U	0.20	4.0		0.86
06192	1,2-Dibromoethane	106-93-4	0.17	U	0.17	4.0		0.86
06192	Dibromomethane	74-95-3	0.24	U	0.24	4.0		0.86
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.0		0.86
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.0		0.86
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	4.0		0.86
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.0		0.86
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.0		0.86
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	4.0		0.86
06192	1,1-Dichloroethene	75-35-4	0.39	U	0.39	4.0		0.86
06192	cis-1,2-Dichloroethene	156-59-2	0.19	U	0.19	4.0		0.86
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.0		0.86
06192	1,2-Dichloropropane	78-87-5	0.17	U	0.17	4.0		0.86
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.0		0.86
06192	2,2-Dichloropropane	594-20-7	0.17	U	0.17	4.0		0.86
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	4.0		0.86
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	4.0		0.86
06192	trans-1,3-Dichloropropene	10061-02-6	0.17	U	0.17	4.0		0.86
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.0		0.86
06192	Freon 113	76-13-1	0.11	U	0.11	4.0		0.86
06192	Freon 133a	75-88-7	0.51	U	0.51	5.1		0.86
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	4.0		0.86
06192	2-Hexanone	591-78-6	1.6	U	1.6	8.1		0.86
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.0		0.86
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.0		0.86
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21	U	0.21	4.0		0.86
06192	4-Methyl-2-pentanone	108-10-1	0.39	U	0.39	8.1		0.86
06192	Methylene Chloride	75-09-2	0.43	J	0.24	4.0		0.86
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.0		0.86

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.10	U	0.10	4.0		0.86
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.0		0.86
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23	U	0.23	4.0		0.86
06192	Tetrachloroethene	127-18-4	0.20	U	0.20	4.0		0.86
06192	Toluene	108-88-3	0.11	J	0.08	4.0		0.86
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	4.0		0.86
06192	1,2,4-Trichlorobenzene	120-82-1	0.18	U	0.18	4.0		0.86
06192	1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	4.0		0.86
06192	1,1,2-Trichloroethane	79-00-5	0.27	U	0.27	4.0		0.86
06192	Trichloroethene	79-01-6	0.15	U	0.15	4.0		0.86
06192	Trichlorofluoromethane	75-69-4	0.29	U	0.29	4.0		0.86
06192	1,2,3-Trichloropropane	96-18-4	0.33	U	0.33	4.0		0.86
06192	1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	4.0		0.86
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.0		0.86
06192	Vinyl Chloride	75-01-4	0.20	U	0.20	4.0		0.86
06192	m+p-Xylene	179601-23-1	0.17	U	0.17	4.0		0.86
06192	o-Xylene	95-47-6	0.17	U	0.17	4.0		0.86
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.9	U	4.9	15		20.76
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	98.3	U	98.3	197		5

Due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the GC/MS semivolatile compounds were raised.

GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	200	U	200	590		1
04688	Benzidine	92-87-5	1,400	U	1,400	3,900		1
04688	Benzoic acid	65-85-0	200	U	200	590		1
04688	Benzyl alcohol	100-51-6	200	U	200	590		1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200		1
04688	Carbazole	86-74-8	20	U	20	200		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	200		1
04688	4-Chloroaniline	106-47-8	79	U	79	200		1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200		1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200		1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200		1
04688	2-Chlorophenol	95-57-8	20	U	20	200		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	200		1
04688	Dibenzofuran	132-64-9	20	U	20	200		1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200		1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200		1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390		1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200		1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	200		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	3,5-Dimethylphenol	108-68-9	39	U	39	200		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	590		1
04688	2,4-Dinitrophenol	51-28-5	790	U	790	2,400		1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	200		1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200		1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	23	J	20	390		1
04688	Hexachlorobenzene	118-74-1	20	U	20	200		1
04688	Hexachlorobutadiene	87-68-3	79	U	79	200		1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	590		1
04688	Hexachloroethane	67-72-1	20	U	20	200		1
04688	Isophorone	78-59-1	20	U	20	200		1
04688	2-Methylphenol	95-48-7	39	U	39	200		1
04688	4-Methylphenol	106-44-5	39	U	39	200		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	20	U	20	200		1
04688	3-Nitroaniline	99-09-2	39	U	39	200		1
04688	4-Nitroaniline	100-01-6	79	U	79	200		1
04688	Nitrobenzene	98-95-3	20	U	20	200		1
04688	2-Nitrophenol	88-75-5	20	U	20	200		1
04688	4-Nitrophenol	100-02-7	200	U	200	590		1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200		1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	200	U	200	590		1
04688	Phenol	108-95-2	20	U	20	200		1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	200		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	200		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.79	U	0.79	2.0		1
10138	Acenaphthylene	208-96-8	0.39	U	0.39	2.0		1
10138	Anthracene	120-12-7	0.39	U	0.39	2.0		1
10138	Benzo(a)anthracene	56-55-3	0.79	U	0.79	2.0		1
10138	Benzo(a)pyrene	50-32-8	0.79	U	0.79	2.0		1
10138	Benzo(b)fluoranthene	205-99-2	1.3	J	0.79	2.0		1
10138	Benzo(g,h,i)perylene	191-24-2	1.0	J	0.79	2.0		1
10138	Benzo(k)fluoranthene	207-08-9	0.79	U	0.79	2.0		1
10138	Butylbenzylphthalate	85-68-7	7.1	U	7.1	21		1
10138	Di-n-butylphthalate	84-74-2	11	J	7.1	21		1
10138	Chrysene	218-01-9	1.0	J	0.39	2.0		1
10138	Dibenz(a,h)anthracene	53-70-3	0.79	U	0.79	2.0		1
10138	Diethylphthalate	84-66-2	7.4	J	7.1	21		1
10138	Dimethylphthalate	131-11-3	7.1	U	7.1	21		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Fluoranthene	206-44-0	0.79	U	0.79	2.0		1
10138	Fluorene	86-73-7	0.79	U	0.79	2.0		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.79	U	0.79	2.0		1
10138	1-Methylnaphthalene	90-12-0	0.79	U	0.79	2.0		1
10138	2-Methylnaphthalene	91-57-6	0.79	U	0.79	2.0		1
10138	Naphthalene	91-20-3	0.79	U	0.79	2.0		1
10138	N-Nitrosodimethylamine	62-75-9	0.79	U	0.79	2.0		1
10138	Di-n-octylphthalate	117-84-0	7.1	U	7.1	21		1
10138	Phenanthrene	85-01-8	0.79	U	0.79	2.0		1
10138	Pyrene	129-00-0	0.79	U	0.79	2.0		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1		20.36
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	88	U	88	180	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	59	U	59	180	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U	120	350	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U	120	350	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	59	U	59	180	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	59	U	59	180	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	59	U	59	180	10000000	1
10132	HMX	2691-41-0	150	U	150	440	10000000	1
10132	Nitrobenzene	98-95-3	59	U	59	180	10000000	1
10132	Nitroglycerin	55-63-0	1,200	U	1,200	3,500	10000000	1
10132	2-Nitrotoluene	88-72-2	120	U	120	180	10000000	1
10132	3-Nitrotoluene	99-08-1	150	U	150	180	10000000	1
10132	4-Nitrotoluene	99-99-0	120	U	120	180	10000000	1
10132	PETN	78-11-5	1,200	U	1,200	3,500	10000000	1
10132	RDX	121-82-4	74	U	74	180	10000000	1
10132	Tetryl	479-45-8	90	U	90	180	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	1,3,5-Trinitrobenzene	99-35-4	59	U	59	180	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	59	U	59	180	10000000	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.2		1
10401	Dalapon	75-99-0	5.2	U	5.2	11		1
10401	2,4-DB	94-82-6	7.9	U	7.9	7.9		1
10401	Dicamba	1918-00-9	0.47	U	0.47	1.4		1
10401	Dinoseb	88-85-7	0.94	U	0.94	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	1.7	U	1.7	2.0		1
10401	MCPA	94-74-6	110	J	90	290		1
10401	MCPP (Mecoprop)	93-65-2	390		88	290		1
10401	2,4,5-T	93-76-5	0.097	U	0.097	0.20		1
10401	2,4,5-TP	93-72-1	0.088	U	0.088	0.20		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for 2,4-DB.
Due to interfering peaks on the chromatogram, the values reported 2,4-DP and 2,4-DB represent the lowest reporting limits attainable.

HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	710	U	710	1,800		1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.078	U	0.078	0.20		1
01363	Alpha BHC	319-84-6	0.040	U	0.040	0.20		1
01363	Beta BHC	319-85-7	0.071	U	0.071	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.040	U	0.040	0.20		1
01363	Chlordane	57-74-9	0.94	U	0.94	4.0		1
01363	p,p-DDD	72-54-8	0.078	U	0.078	0.40		1
01363	p,p-DDE	72-55-9	0.078	U	0.078	0.40		1
01363	p,p-DDT	50-29-3	0.29	U	0.29	0.40		1
01363	Delta BHC	319-86-8	0.042	U	0.042	0.20		1
01363	Dieldrin	60-57-1	0.078	U	0.078	0.40		1
01363	Endosulfan I	959-98-8	0.052	U	0.052	0.20		1
01363	Endosulfan II	33213-65-9	0.078	U	0.078	0.40		1
01363	Endosulfan Sulfate	1031-07-8	0.078	U	0.078	0.40		1
01363	Endrin	72-20-8	0.078	U	0.078	0.40		1
01363	Endrin Aldehyde	7421-93-4	0.078	U	0.078	0.40		1
01363	Endrin Ketone	53494-70-5	0.078	U	0.078	0.40		1
01363	Heptachlor	76-44-8	0.071	U	0.071	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.040	U	0.040	0.20		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Methoxychlor	72-43-5	0.40	U	0.40	2.0		1
01363	Mirex	2385-85-5	0.14	U	0.14	0.40		1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.8		1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.9		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.9		1
10225	Aroclor 5460	11126-42-4	2.5	J	1.2	3.9		1
10225	PCB-1016	12674-11-2	0.39	U	0.39	2.0		1
10225	PCB-1221	11104-28-2	0.59	U	0.59	2.0		1
10225	PCB-1232	11141-16-5	0.61	U	0.61	2.0		1
10225	PCB-1242	53469-21-9	0.59	U	0.59	2.0		1
10225	PCB-1248	12672-29-6	0.39	U	0.39	2.0		1
10225	PCB-1254	11097-69-1	0.79	J	0.39	2.0		1
10225	PCB-1260	11096-82-5	1.0	J	0.39	2.0		1
10225	PCB-1262	37324-23-5	0.39	U	0.39	2.0		1
10225	PCB-1268	11100-14-4	0.39	U	0.39	2.0		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.47	U	0.47	1.4		1
10199	EFH (C15-C20)	n.a.	0.80	J	0.47	1.4		1
10199	EFH (C21-C30)	n.a.	7.5		0.47	1.4		1
10199	EFH (C30 - C40)	n.a.	32		0.47	1.4		1
10199	EFH (C8-C11)	n.a.	0.47	U	0.47	1.4		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	120	U	120	590		1
10501	Isopropanol	67-63-0	120	U	120	590		1
10501	Methanol	67-56-1	120	U	120	590		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.9	U	5.9	15		1
08283	Ethylene glycol	107-21-1	13	U	13	15		1
08283	Propylene glycol	57-55-6	5.9	U	5.9	15		1
	Reporting limits were raised due to interference from the sample matrix.							
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.8	U	1.8	4.1		1
10318	o-Terphenyl	84-15-1	1.8	U	1.8	4.1		1
10318	p-Terphenyl	92-94-4	1.8	U	1.8	4.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,100		5.87	23.4		1
07914	Boron	7440-42-8	5.79	J	1.04	5.84		1
01650	Calcium	7440-70-2	22,300		7.16	23.4		1
01654	Iron	7439-89-6	12,400		5.50	23.4		1
01656	Lithium	7439-93-2	11.2		0.26	2.3		1
01657	Magnesium	7439-95-4	3,230		2.97	11.7		1
06958	Manganese	7439-96-5	156		0.0911	0.584		1
10145	Phosphorus	7723-14-0	391		0.654	11.7		1
01662	Potassium	7440-09-7	2,470		21.0	58.4		1
01667	Sodium	7440-23-5	72.7	J	43.6	117		1
07968	Strontium	7440-24-6	46.2		0.0724	0.584		1
06969	Tin	7440-31-5	1.61	J	1.17	11.7		1
06970	Titanium	7440-32-6	615		0.444	1.17		1
10146	Zirconium	7440-67-7	1.94	J	0.981	5.84		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.128	J	0.0687	0.229		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.18		0.0687	0.458		2
06126	Barium	7440-39-3	122		0.124	0.458		2
06127	Beryllium	7440-41-7	0.624		0.0183	0.114		2
06128	Cadmium	7440-43-9	0.254		0.0412	0.114		2
06131	Chromium	7440-47-3	28.6		0.137	0.458		2
06132	Cobalt	7440-48-4	8.64		0.0229	0.114		2
06133	Copper	7440-50-8	12.9		0.0771	0.467		2
06135	Lead	7439-92-1	9.56		0.0119	0.229		2
06138	Molybdenum	7439-98-7	0.502		0.0572	0.114		2
06139	Nickel	7440-02-0	17.3		0.114	0.458		2
06141	Selenium	7782-49-2	0.265	J	0.0458	0.458		2
06142	Silver	7440-22-4	0.0300	J	0.0137	0.114		2
06145	Thallium	7440-28-0	0.295		0.0343	0.114		2
06148	Vanadium	7440-62-2	54.1		0.0257	0.117		2
06149	Zinc	7440-66-6	71.2		0.641	3.43		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0031	U	0.0031	0.110		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8		0.94	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.94	U	0.94	1.8		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.6	U	10.6	35.4		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL118 SDG#: DE051-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.44	J	0.24	1.2		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.21	U	0.21	0.58		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	441		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.90		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	15.2		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103621AA	12/28/2010	16:46	Chelsea B Eastep	0.86
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103631AA	12/29/2010	10:31	Jason M Long	20.76
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010	17:25	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035723411	12/23/2010	17:55	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035723411	12/23/2010	17:55	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035723411	12/23/2010	17:22	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011	17:17	Timothy J Trees	5
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011	04:34	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011	14:27	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010	10:40	Kelli M Barto	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL118 SDG#: DE051-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10357A34B	12/27/2010 19:41	Carrie E Miller	20.36
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:21	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103650008A	01/06/2011 05:56	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103610005A	12/29/2010 19:17	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 07:37	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 19:05	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 07:07	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103610005A	12/27/2010 15:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103650008A	01/03/2011 16:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 23:05	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103630030A	12/29/2010 23:03	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103630032A	12/29/2010 20:57	Robert Brown	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103640012A	01/05/2011 11:49	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103640012A	12/31/2010 00:30	David V Hershey Jr	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103630032A	12/29/2010 17:00	Tyler O Griffin	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103630030A	12/29/2010 17:00	Tyler O Griffin	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:22	Eric L Eby	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173166
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL118 SDG#: DE051-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:08	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/11/2011 13:22	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06133	Copper	SW-846 6020	2	110101026002A	01/12/2011 09:39	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:08	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:08	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:39	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:08	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:25	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 13:51	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11013013201B	01/14/2011 13:51	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11017017201A	01/18/2011 11:08	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 20:11	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	2	11004102201A	01/04/2011 19:07	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11017017201A	01/17/2011 12:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11004102201A	01/04/2011 09:15	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173167
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	580		1
04688	Benzidine	92-87-5	1,400	U	1,400	3,900		1
04688	Benzoic acid	65-85-0	190	U	190	580		1
04688	Benzyl alcohol	100-51-6	190	U	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580		1
04688	2,4-Dinitrophenol	51-28-5	770	U	770	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	20	J	19	390		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	39	U	39	190		1
04688	4-Methylphenol	106-44-5	39	U	39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	39	U	39	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	580		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173167
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.77	U	0.77	1.9		1
10138	Acenaphthylene	208-96-8	0.39	U	0.39	1.9		1
10138	Anthracene	120-12-7	0.81	J	0.39	1.9		1
10138	Benzo(a)anthracene	56-55-3	7.0		0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	6.1		0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	9.2		0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	3.0		0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	3.6		0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	7.0	U	7.0	21		1
10138	Di-n-butylphthalate	84-74-2	10	J	7.0	21		1
10138	Chrysene	218-01-9	6.8		0.39	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.80	J	0.77	1.9		1
10138	Diethylphthalate	84-66-2	7.0	U	7.0	21		1
10138	Dimethylphthalate	131-11-3	7.0	U	7.0	21		1
10138	Fluoranthene	206-44-0	12		0.77	1.9		1
10138	Fluorene	86-73-7	0.77	U	0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	2.6		0.77	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.77	U	0.77	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.77	U	0.77	1.9		1
10138	Naphthalene	91-20-3	0.77	U	0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.77	U	0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	7.0	U	7.0	21		1
10138	Phenanthrene	85-01-8	3.5		0.77	1.9		1
10138	Pyrene	129-00-0	12		0.77	1.9		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.2		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	1.0	U	1.0	2.0		1
10401	Dicamba	1918-00-9	2.3	U	2.3	2.3		1
10401	Dinoseb	88-85-7	0.93	U	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93	U	0.93	2.0		1
10401	MCPA	94-74-6	88	U	88	290		1
10401	MCPP (Mecoprop)	93-65-2	87	U	87	290		1
10401	2,4,5-T	93-76-5	0.12	J	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.087	U	0.087	0.20		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173167
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	2,4-DB.							
	Due to interfering peaks on the chromatogram, the values reported for dicamba and 2,4-DB represent the lowest reporting limits attainable.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.077	U	0.077	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.070	U	0.070	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	0.93	U	0.93	3.9		1
01363	p,p-DDD	72-54-8	0.077	U	0.077	0.39		1
01363	p,p-DDE	72-55-9	0.077	U	0.077	0.39		1
01363	p,p-DDT	50-29-3	0.077	U	0.077	0.39		1
01363	Delta BHC	319-86-8	0.042	U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.077	U	0.077	0.39		1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.077	U	0.077	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.077	U	0.077	0.39		1
01363	Endrin	72-20-8	0.077	U	0.077	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.077	U	0.077	0.39		1
01363	Endrin Ketone	53494-70-5	0.077	U	0.077	0.39		1
01363	Heptachlor	76-44-8	0.070	U	0.070	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039	U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.077	U	0.077	0.39		1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.7		1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.58	U	0.58	2.0		1
10225	PCB-1232	11141-16-5	0.60	U	0.60	2.0		1
10225	PCB-1242	53469-21-9	0.58	U	0.58	2.0		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0		1
10225	PCB-1260	11096-82-5	0.38	U	0.38	2.0		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,500		5.73	22.8		1
07914	Boron	7440-42-8	5.13	J	1.01	5.69		1
01650	Calcium	7440-70-2	5,190		6.98	22.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173167
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01654	Iron	7439-89-6	21,000		5.36	22.8		1
01656	Lithium	7439-93-2	23.0		0.25	2.3		1
01657	Magnesium	7439-95-4	4,940		2.89	11.4		1
06958	Manganese	7439-96-5	283		0.0888	0.569		1
10145	Phosphorus	7723-14-0	423		0.638	11.4		1
01662	Potassium	7440-09-7	3,050		20.5	56.9		1
01667	Sodium	7440-23-5	95.5	J	42.5	114		1
07968	Strontium	7440-24-6	25.6		0.0706	0.569		1
06969	Tin	7440-31-5	2.26	J	1.14	11.4		1
06970	Titanium	7440-32-6	1,130		0.433	1.14		1
10146	Zirconium	7440-67-7	3.01	J	0.956	5.69		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.120	J	0.0683	0.228		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	3.21		0.0683	0.455		2
06126	Barium	7440-39-3	102		0.123	0.455		2
06127	Beryllium	7440-41-7	0.404		0.0182	0.114		2
06128	Cadmium	7440-43-9	0.121		0.0410	0.114		2
06131	Chromium	7440-47-3	14.9		0.137	0.455		2
06132	Cobalt	7440-48-4	5.29		0.0228	0.114		2
06133	Copper	7440-50-8	13.5		0.0767	0.465		2
06135	Lead	7439-92-1	5.00		0.0118	0.228		2
06138	Molybdenum	7439-98-7	0.447		0.0569	0.114		2
06139	Nickel	7440-02-0	10.4		0.114	0.455		2
06141	Selenium	7782-49-2	0.127	J	0.0455	0.455		2
06142	Silver	7440-22-4	0.0305	J	0.0137	0.114		2
06145	Thallium	7440-28-0	0.243		0.0342	0.114		2
06148	Vanadium	7440-62-2	48.4		0.0256	0.116		2
06149	Zinc	7440-66-6	57.2		0.638	3.42		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0161	J	0.0031	0.109		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.5		0.93	1.2		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.5	U	10.5	34.8		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.30	J	0.23	1.2		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	459		10.0	10.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173167
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.70	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	13.9	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 00:31	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 10:44	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 03:31	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 19:20	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 07:25	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173167
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 09:35	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 13:31	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:17	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 13:31	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 13:31	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:17	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 13:31	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:26	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 13:08	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/14/2011 22:51	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11017243201A	01/20/2011 20:17	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173168
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,800		19	190		1
04688	Acenaphthylene	208-96-8	1,900		19	190		1
04688	Aniline	62-53-3	1,200		190	580		1
04688	Anthracene	120-12-7	1,900		19	190		1
04688	Benzidine	92-87-5	3,700	J	1,400	3,900		1
04688	Benzo(a)anthracene	56-55-3	1,900		19	190		1
04688	Benzo(a)pyrene	50-32-8	1,700		19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,700		19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,500		19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,800		19	190		1
04688	Benzoic acid	65-85-0	1,900		190	580		1
04688	Benzyl alcohol	100-51-6	1,800		190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	1,800		19	190		1
04688	Butylbenzylphthalate	85-68-7	2,100		19	190		1
04688	Di-n-butylphthalate	84-74-2	1,900		19	190		1
04688	Carbazole	86-74-8	1,900		19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	1,900		39	190		1
04688	4-Chloroaniline	106-47-8	1,100		77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,900		19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,600		19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,700		19	190		1
04688	2-Chloronaphthalene	91-58-7	1,600		19	190		1
04688	2-Chlorophenol	95-57-8	1,900		19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900		39	190		1
04688	Chrysene	218-01-9	1,800		19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,600		19	190		1
04688	Dibenzofuran	132-64-9	1,900		19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,600		19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,500		19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,500		19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,400		120	390		1
04688	2,4-Dichlorophenol	120-83-2	1,900		19	190		1
04688	Diethylphthalate	84-66-2	1,800		19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,900		39	190		1
04688	3,5-Dimethylphenol	108-68-9	2,000		39	190		1
04688	Dimethylphthalate	131-11-3	1,800		19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,500		190	580		1
04688	2,4-Dinitrophenol	51-28-5	2,800		770	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	1,900		39	190		1
04688	2,6-Dinitrotoluene	606-20-2	1,900		19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	2,100		19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000		19	390		1
04688	Fluoranthene	206-44-0	1,900		19	190		1
04688	Fluorene	86-73-7	1,900		19	190		1
04688	Hexachlorobenzene	118-74-1	1,900		19	190		1
04688	Hexachlorobutadiene	87-68-3	1,800		77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	2,500		190	580		1
04688	Hexachloroethane	67-72-1	1,600		19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600		19	190		1
04688	Isophorone	78-59-1	1,800		19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173168
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,800	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,700	19	190		1
04688	2-Methylphenol	95-48-7	1,800	39	190		1
04688	4-Methylphenol	106-44-5	1,800	39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,700	19	190		1
04688	2-Nitroaniline	88-74-4	2,000	19	190		1
04688	3-Nitroaniline	99-09-2	1,900	39	190		1
04688	4-Nitroaniline	100-01-6	1,600	77	190		1
04688	Nitrobenzene	98-95-3	1,900	19	190		1
04688	2-Nitrophenol	88-75-5	1,900	19	190		1
04688	4-Nitrophenol	100-02-7	2,100	190	580		1
04688	N-Nitrosodimethylamine	62-75-9	1,500	39	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,700	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,900	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,900	19	190		1
04688	Pentachlorophenol	87-86-5	1,600	190	580		1
04688	Phenanthrene	85-01-8	1,900	19	190		1
04688	Phenol	108-95-2	1,800	19	190		1
04688	Pyrene	129-00-0	2,000	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,800	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	1,900	39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	2,000	39	190		1
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	36	0.77	1.9		1
10138	Acenaphthylene	208-96-8	37	0.39	1.9		1
10138	Anthracene	120-12-7	35	0.39	1.9		1
10138	Benzo(a)anthracene	56-55-3	38	0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	36	0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	39	0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	25	0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	37	0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	42	7.0	21		1
10138	Di-n-butylphthalate	84-74-2	49	7.0	21		1
10138	Chrysene	218-01-9	35	0.39	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	30	0.77	1.9		1
10138	Diethylphthalate	84-66-2	45	7.0	21		1
10138	Dimethylphthalate	131-11-3	41	7.0	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	41	7.0	21		1
10138	Fluoranthene	206-44-0	37	0.77	1.9		1
10138	Fluorene	86-73-7	36	0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	30	0.77	1.9		1
10138	1-Methylnaphthalene	90-12-0	35	0.77	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173168
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	33		0.77	1.9		1
10138	Naphthalene	91-20-3	35		0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	40		0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	40		7.0	21		1
10138	Phenanthrene	85-01-8	35		0.77	1.9		1
10138	Pyrene	129-00-0	33		0.77	1.9		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	12		1.4	4.2		1
10401	Dalapon	75-99-0	16		5.1	10		1
10401	2,4-DB	94-82-6	9.2		0.72	2.0		1
10401	Dicamba	1918-00-9	1.0	J	0.46	1.4		1
10401	Dinoseb	88-85-7	2.0	J	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	9.8		0.93	2.0		1
10401	MCPA	94-74-6	1,000		88	290		1
10401	MCPP (Mecoprop)	93-65-2	960		87	290		1
10401	2,4,5-T	93-76-5	0.93		0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.82		0.087	0.20		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for 2,4-DB.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.39		0.077	0.20		1
01363	Alpha BHC	319-84-6	0.26		0.039	0.20		1
01363	Beta BHC	319-85-7	0.27		0.070	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.29		0.039	0.20		1
01363	Chlordane	57-74-9	0.93	U	0.93	3.9		1
01363	p,p-DDD	72-54-8	0.51		0.077	0.39		1
01363	p,p-DDE	72-55-9	0.77		0.077	0.39		1
01363	p,p-DDT	50-29-3	0.58		0.077	0.39		1
01363	Delta BHC	319-86-8	0.26		0.042	0.20		1
01363	Dieldrin	60-57-1	0.52		0.077	0.39		1
01363	Endosulfan I	959-98-8	0.21		0.051	0.20		1
01363	Endosulfan II	33213-65-9	0.62		0.077	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.70		0.077	0.39		1
01363	Endrin	72-20-8	0.53		0.077	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.46		0.077	0.39		1
01363	Endrin Ketone	53494-70-5	0.70		0.077	0.39		1
01363	Heptachlor	76-44-8	0.33		0.070	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.36		0.039	0.20		1
01363	Methoxychlor	72-43-5	3.0		0.39	1.9		1
01363	Mirex	2385-85-5	0.077	U	0.077	0.39		1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.7		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173168
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.8		1
10225	PCB-1016	12674-11-2	25		0.38	2.0		1
10225	PCB-1221	11104-28-2	0.58	U	0.58	2.0		1
10225	PCB-1232	11141-16-5	0.60	U	0.60	2.0		1
10225	PCB-1242	53469-21-9	0.58	U	0.58	2.0		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0		1
10225	PCB-1260	11096-82-5	26		0.38	2.0		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,300		5.56	22.1		1
07914	Boron	7440-42-8	199		0.984	5.53		1
01650	Calcium	7440-70-2	4,790		6.78	22.1		1
01654	Iron	7439-89-6	28,800		5.21	22.1		1
01656	Lithium	7439-93-2	138		0.24	2.2		1
01657	Magnesium	7439-95-4	6,840		2.81	11.1		1
06958	Manganese	7439-96-5	397		0.0863	0.553		1
10145	Phosphorus	7723-14-0	583		0.619	11.1		1
01662	Potassium	7440-09-7	4,870		19.9	55.3		1
01667	Sodium	7440-23-5	1,130		41.3	111		1
07968	Strontium	7440-24-6	126		0.0686	0.553		1
06969	Tin	7440-31-5	398		1.11	11.1		1
06970	Titanium	7440-32-6	1,560		0.420	1.11		1
10146	Zirconium	7440-67-7	108		0.929	5.53		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.551		0.0683	0.228		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.18		0.0683	0.455		2
06126	Barium	7440-39-3	119		0.123	0.455		2
06127	Beryllium	7440-41-7	1.40		0.0182	0.114		2
06128	Cadmium	7440-43-9	1.37		0.0410	0.114		2
06131	Chromium	7440-47-3	27.6		0.137	0.455		2
06132	Cobalt	7440-48-4	58.9		0.0228	0.114		2
06133	Copper	7440-50-8	25.1		0.0744	0.451		2
06135	Lead	7439-92-1	9.11		0.0118	0.228		2
06138	Molybdenum	7439-98-7	12.4		0.0569	0.114		2
06139	Nickel	7440-02-0	23.8		0.114	0.455		2
06141	Selenium	7782-49-2	2.16		0.0455	0.455		2
06142	Silver	7440-22-4	12.4		0.0137	0.114		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173168
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06145	Thallium	7440-28-0	0.724	0.0342	0.114		2
06148	Vanadium	7440-62-2	56.4	0.0248	0.113		2
06149	Zinc	7440-66-6	70.2	0.638	3.42		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.193	0.0032	0.111		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.6	0.93	1.2		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	503	10.5	34.8		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	46.2	1.2	5.8		5
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11625	28a Moisture Content by 160.3	n.a.	13.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 01:06	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 11:16	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 03:58	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 19:34	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 07:44	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173168
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 09:46	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 13:40	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06133	Copper	SW-846 6020	2	110101026002A	01/12/2011 09:22	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 13:40	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 13:40	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:22	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 13:40	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:31	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 13:36	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/14/2011 23:37	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 20:36	Ashley M Adams	5
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173169
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900	19	190		1
04688	Acenaphthylene	208-96-8	1,900	19	190		1
04688	Aniline	62-53-3	1,100	190	580		1
04688	Anthracene	120-12-7	1,900	19	190		1
04688	Benzidine	92-87-5	4,800	1,400	3,900		1
04688	Benzo(a)anthracene	56-55-3	1,900	19	190		1
04688	Benzo(a)pyrene	50-32-8	1,700	19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,700	19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,600	19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,700	19	190		1
04688	Benzoic acid	65-85-0	2,000	190	580		1
04688	Benzyl alcohol	100-51-6	1,700	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	1,800	19	190		1
04688	Butylbenzylphthalate	85-68-7	2,100	19	190		1
04688	Di-n-butylphthalate	84-74-2	1,900	19	190		1
04688	Carbazole	86-74-8	1,900	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	1,900	39	190		1
04688	4-Chloroaniline	106-47-8	1,100	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,800	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,600	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,600	19	190		1
04688	2-Chloronaphthalene	91-58-7	1,600	19	190		1
04688	2-Chlorophenol	95-57-8	1,800	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900	39	190		1
04688	Chrysene	218-01-9	1,800	19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,600	19	190		1
04688	Dibenzofuran	132-64-9	1,900	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,500	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,400	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,500	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,400	120	390		1
04688	2,4-Dichlorophenol	120-83-2	1,900	19	190		1
04688	Diethylphthalate	84-66-2	1,900	19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,900	39	190		1
04688	3,5-Dimethylphenol	108-68-9	2,000	39	190		1
04688	Dimethylphthalate	131-11-3	1,800	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,500	190	580		1
04688	2,4-Dinitrophenol	51-28-5	2,800	770	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	2,000	39	190		1
04688	2,6-Dinitrotoluene	606-20-2	1,900	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	2,000	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000	19	390		1
04688	Fluoranthene	206-44-0	1,900	19	190		1
04688	Fluorene	86-73-7	1,900	19	190		1
04688	Hexachlorobenzene	118-74-1	1,900	19	190		1
04688	Hexachlorobutadiene	87-68-3	1,800	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	2,100	190	580		1
04688	Hexachloroethane	67-72-1	1,500	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,600	19	190		1
04688	Isophorone	78-59-1	1,800	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173169
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg	ug/kg	ug/kg	ug/kg	
04688	1-Methylnaphthalene	90-12-0	1,800	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,700	19	190		1
04688	2-Methylphenol	95-48-7	1,800	39	190		1
04688	4-Methylphenol	106-44-5	1,700	39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,700	19	190		1
04688	2-Nitroaniline	88-74-4	2,000	19	190		1
04688	3-Nitroaniline	99-09-2	1,900	39	190		1
04688	4-Nitroaniline	100-01-6	1,600	77	190		1
04688	Nitrobenzene	98-95-3	1,900	19	190		1
04688	2-Nitrophenol	88-75-5	1,900	19	190		1
04688	4-Nitrophenol	100-02-7	2,100	190	580		1
04688	N-Nitrosodimethylamine	62-75-9	1,400	39	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,700	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,900	19	190		1
04688	Pentachlorophenol	87-86-5	1,500	190	580		1
04688	Phenanthrene	85-01-8	1,800	19	190		1
04688	Phenol	108-95-2	1,800	19	190		1
04688	Pyrene	129-00-0	2,100	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,800	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	2,000	39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	2,000	39	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	35	0.77	1.9		1
10138	Acenaphthylene	208-96-8	40	0.39	1.9		1
10138	Anthracene	120-12-7	35	0.39	1.9		1
10138	Benzo(a)anthracene	56-55-3	41	0.77	1.9		1
10138	Benzo(a)pyrene	50-32-8	40	0.77	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	42	0.77	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	25	0.77	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	42	0.77	1.9		1
10138	Butylbenzylphthalate	85-68-7	42	7.0	21		1
10138	Di-n-butylphthalate	84-74-2	52	7.0	21		1
10138	Chrysene	218-01-9	38	0.39	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	31	0.77	1.9		1
10138	Diethylphthalate	84-66-2	42	7.0	21		1
10138	Dimethylphthalate	131-11-3	43	7.0	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	47	7.0	21		1
10138	Fluoranthene	206-44-0	42	0.77	1.9		1
10138	Fluorene	86-73-7	36	0.77	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	30	0.77	1.9		1
10138	1-Methylnaphthalene	90-12-0	35	0.77	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173169
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	31		0.77	1.9		1
10138	Naphthalene	91-20-3	34		0.77	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	40		0.77	1.9		1
10138	Di-n-octylphthalate	117-84-0	45		7.0	21		1
10138	Phenanthrene	85-01-8	36		0.77	1.9		1
10138	Pyrene	129-00-0	37		0.77	1.9		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	11		1.4	4.2		1
10401	Dalapon	75-99-0	14		5.1	10		1
10401	2,4-DB	94-82-6	8.0		0.72	2.0		1
10401	Dicamba	1918-00-9	0.99	J	0.46	1.4		1
10401	Dinoseb	88-85-7	0.98	J	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	9.5		0.93	2.0		1
10401	MCPA	94-74-6	800		88	290		1
10401	MCPP (Mecoprop)	93-65-2	770		87	290		1
10401	2,4,5-T	93-76-5	0.85		0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.80		0.087	0.20		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for 2,4-DB.

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.36		0.077	0.20		1
01363	Alpha BHC	319-84-6	0.23		0.039	0.20		1
01363	Beta BHC	319-85-7	0.24		0.070	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.23		0.039	0.20		1
01363	Chlordane	57-74-9	0.93	U	0.93	3.9		1
01363	p,p-DDD	72-54-8	0.56		0.077	0.39		1
01363	p,p-DDE	72-55-9	0.77		0.077	0.39		1
01363	p,p-DDT	50-29-3	0.49		0.077	0.39		1
01363	Delta BHC	319-86-8	0.28		0.042	0.20		1
01363	Dieldrin	60-57-1	0.55		0.077	0.39		1
01363	Endosulfan I	959-98-8	0.21		0.051	0.20		1
01363	Endosulfan II	33213-65-9	0.64		0.077	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.81		0.077	0.39		1
01363	Endrin	72-20-8	0.51		0.077	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.51		0.077	0.39		1
01363	Endrin Ketone	53494-70-5	0.69		0.077	0.39		1
01363	Heptachlor	76-44-8	0.27		0.070	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.34		0.039	0.20		1
01363	Methoxychlor	72-43-5	2.9		0.39	1.9		1
01363	Mirex	2385-85-5	0.077	U	0.077	0.39		1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.7		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173169
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.8		1
10225	PCB-1016	12674-11-2	32		0.38	2.0		1
10225	PCB-1221	11104-28-2	0.58	U	0.58	2.0		1
10225	PCB-1232	11141-16-5	0.60	U	0.60	2.0		1
10225	PCB-1242	53469-21-9	0.58	U	0.58	2.0		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0		1
10225	PCB-1260	11096-82-5	29		0.38	2.0		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,300		5.84	23.2		1
07914	Boron	7440-42-8	211		1.03	5.81		1
01650	Calcium	7440-70-2	4,000		7.12	23.2		1
01654	Iron	7439-89-6	21,100		5.47	23.2		1
01656	Lithium	7439-93-2	133		0.26	2.3		1
01657	Magnesium	7439-95-4	5,300		2.95	11.6		1
06958	Manganese	7439-96-5	346		0.0906	0.581		1
10145	Phosphorus	7723-14-0	588		0.650	11.6		1
01662	Potassium	7440-09-7	5,020		20.9	58.1		1
01667	Sodium	7440-23-5	1,230		43.3	116		1
07968	Strontium	7440-24-6	127		0.0720	0.581		1
06969	Tin	7440-31-5	421		1.16	11.6		1
06970	Titanium	7440-32-6	1,550		0.441	1.16		1
10146	Zirconium	7440-67-7	114		0.976	5.81		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.591		0.0670	0.223		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.73		0.0670	0.447		2
06126	Barium	7440-39-3	133		0.121	0.447		2
06127	Beryllium	7440-41-7	1.27		0.0179	0.112		2
06128	Cadmium	7440-43-9	1.33		0.0402	0.112		2
06131	Chromium	7440-47-3	27.2		0.134	0.447		2
06132	Cobalt	7440-48-4	58.2		0.0223	0.112		2
06133	Copper	7440-50-8	24.8		0.0730	0.442		2
06135	Lead	7439-92-1	8.74		0.0116	0.223		2
06138	Molybdenum	7439-98-7	12.4		0.0558	0.112		2
06139	Nickel	7440-02-0	22.3		0.112	0.447		2
06141	Selenium	7782-49-2	2.11		0.0447	0.447		2
06142	Silver	7440-22-4	12.3		0.0134	0.112		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173169
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		mg/kg	mg/kg	mg/kg	mg/kg	
06145	Thallium	7440-28-0	0.749	0.0335	0.112		2
06148	Vanadium	7440-62-2	57.1	0.0243	0.111		2
06149	Zinc	7440-66-6	74.3	0.625	3.35		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.200	0.0032	0.111		1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11625	28a Moisture Content by 160.3	n.a.	13.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011	01:40	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011	11:48	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011	18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010	06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011	04:26	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011	19:48	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011	08:02	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011	06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010	06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011	23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010	09:51	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010	09:51	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010	09:51	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010	09:51	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010	09:51	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010	09:51	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010	09:51	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010	09:51	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010	09:51	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010	09:51	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010	09:51	Eric L Eby	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173169
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 09:51	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 13:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06133	Copper	SW-846 6020	2	110101026002A	01/12/2011 09:24	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 13:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 13:44	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:24	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 13:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:32	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173170
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,600		5.62	22.3		1
07914	Boron	7440-42-8	4.25	J	0.994	5.58		1
01650	Calcium	7440-70-2	3,150		6.85	22.3		1
01654	Iron	7439-89-6	18,600		5.26	22.3		1
01656	Lithium	7439-93-2	21.1		0.25	2.2		1
01657	Magnesium	7439-95-4	4,350		2.84	11.2		1
06958	Manganese	7439-96-5	278		0.0871	0.558		1
10145	Phosphorus	7723-14-0	365		0.625	11.2		1
01662	Potassium	7440-09-7	2,850		20.1	55.8		1
01667	Sodium	7440-23-5	95.8	J	41.7	112		1
07968	Strontium	7440-24-6	19.3		0.0692	0.558		1
06969	Tin	7440-31-5	2.26	J	1.12	11.2		1
06970	Titanium	7440-32-6	1,140		0.424	1.12		1
10146	Zirconium	7440-67-7	2.34	J	0.938	5.58		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0697	U	0.0697	0.232		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.36		0.0697	0.465		2
06126	Barium	7440-39-3	100		0.125	0.465		2
06127	Beryllium	7440-41-7	0.484		0.0186	0.116		2
06128	Cadmium	7440-43-9	0.131		0.0418	0.116		2
06131	Chromium	7440-47-3	16.7		0.139	0.465		2
06132	Cobalt	7440-48-4	5.59		0.0232	0.116		2
06133	Copper	7440-50-8	9.79		0.0767	0.465		2
06135	Lead	7439-92-1	5.27		0.0121	0.232		2
06138	Molybdenum	7439-98-7	0.523		0.0581	0.116		2
06139	Nickel	7440-02-0	11.7		0.116	0.465		2
06141	Selenium	7782-49-2	0.113	J	0.0465	0.465		2
06142	Silver	7440-22-4	0.0330	J	0.0139	0.116		2
06145	Thallium	7440-28-0	0.252		0.0348	0.116		2
06148	Vanadium	7440-62-2	34.9		0.0256	0.116		2
06149	Zinc	7440-66-6	58.3		0.650	3.48		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0140	J	0.0031	0.107		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0		0.93	1.2		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.5	U	10.5	34.8		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.46	J	0.23	1.2		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-100-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173170
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08DUP

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry		**ASTM D1498**		**mV**	**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential		n.a.	457	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C		n.a.	7.76	0.0100	0.0100		1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11625	28a Moisture Content by 160.3		n.a.	13.9	0.50	0.50		1
11626	28a Moisture Content by 160.3		n.a.	12.7	0.50	0.50		1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.							

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 09:42	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 13:37	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173170
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL100 SDG#: DE051-08DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:21	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/11/2011 13:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 13:37	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:21	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 13:37	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:30	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 13:22	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/14/2011 23:14	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11017243201A	01/20/2011 21:19	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.7	U	6.7	8.0		0.8
06192	Benzene	71-43-2	0.1	U	0.1	4.0		0.8
06192	Bromobenzene	108-86-1	0.13	U	0.13	4.0		0.8
06192	Bromochloromethane	74-97-5	0.33	U	0.33	4.0		0.8
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.0		0.8
06192	Bromoform	75-25-2	0.40	U	0.40	4.0		0.8
06192	Bromomethane	74-83-9	0.25	U	0.25	4.0		0.8
06192	2-Butanone	78-93-3	1.2	U	1.2	8.0		0.8
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.0		0.8
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.0		0.8
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	4.0		0.8
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	4.0		0.8
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.0		0.8
06192	Chloroethane	75-00-3	0.13	U	0.13	4.0		0.8
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30	U	0.30	4.0		0.8
06192	Chloroform	67-66-3	0.12	U	0.12	4.0		0.8
06192	Chloromethane	74-87-3	0.33	U	0.33	4.0		0.8
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	4.0		0.8
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	4.0		0.8
06192	Chlorotrifluoroethene	79-38-9	0.50	U	0.50	5.0		0.8
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.70	U	0.70	4.0		0.8
06192	Dibromochloromethane	124-48-1	0.20	U	0.20	4.0		0.8
06192	1,2-Dibromoethane	106-93-4	0.17	U	0.17	4.0		0.8
06192	Dibromomethane	74-95-3	0.24	U	0.24	4.0		0.8
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.0		0.8
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.0		0.8
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	4.0		0.8
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.0		0.8
06192	1,1-Dichloroethane	75-34-3	0.1	U	0.1	4.0		0.8
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	4.0		0.8
06192	1,1-Dichloroethene	75-35-4	0.39	U	0.39	4.0		0.8
06192	cis-1,2-Dichloroethene	156-59-2	0.19	U	0.19	4.0		0.8
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.0		0.8
06192	1,2-Dichloropropane	78-87-5	0.17	U	0.17	4.0		0.8
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.0		0.8
06192	2,2-Dichloropropane	594-20-7	0.17	U	0.17	4.0		0.8
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	4.0		0.8
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	4.0		0.8
06192	trans-1,3-Dichloropropene	10061-02-6	0.17	U	0.17	4.0		0.8
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.0		0.8
06192	Freon 113	76-13-1	0.11	U	0.11	4.0		0.8
06192	Freon 133a	75-88-7	0.50	U	0.50	5.0		0.8
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	4.0		0.8
06192	2-Hexanone	591-78-6	1.6	U	1.6	8.0		0.8
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.0		0.8
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.0		0.8
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21	U	0.21	4.0		0.8
06192	4-Methyl-2-pentanone	108-10-1	0.39	U	0.39	8.0		0.8
06192	Methylene Chloride	75-09-2	0.43	J	0.24	4.0		0.8
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.0		0.8

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.1	U	0.1	4.0		0.8
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.0		0.8
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23	U	0.23	4.0		0.8
06192	Tetrachloroethene	127-18-4	0.20	U	0.20	4.0		0.8
06192	Toluene	108-88-3	0.11	J	0.08	4.0		0.8
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	4.0		0.8
06192	1,2,4-Trichlorobenzene	120-82-1	0.18	U	0.18	4.0		0.8
06192	1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	4.0		0.8
06192	1,1,2-Trichloroethane	79-00-5	0.27	U	0.27	4.0		0.8
06192	Trichloroethene	79-01-6	0.15	U	0.15	4.0		0.8
06192	Trichlorofluoromethane	75-69-4	0.29	U	0.29	4.0		0.8
06192	1,2,3-Trichloropropane	96-18-4	0.33	U	0.33	4.0		0.8
06192	1,2,4-Trimethylbenzene	95-63-6	0.40	U	0.40	4.0		0.8
06192	1,3,5-Trimethylbenzene	108-67-8	0.1	U	0.1	4.0		0.8
06192	Vinyl Chloride	75-01-4	0.20	U	0.20	4.0		0.8
06192	m+p-Xylene	179601-23-1	0.17	U	0.17	4.0		0.8
06192	o-Xylene	95-47-6	0.17	U	0.17	4.0		0.8
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.2	U	5.2	15		20.66
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	104	U	104	208		5

Due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the GC/MS semivolatile compounds were raised.

GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	210	U	210	620		1
04688	Benzidine	92-87-5	1,500	U	1,500	4,200		1
04688	Benzoic acid	65-85-0	210	U	210	620		1
04688	Benzyl alcohol	100-51-6	210	U	210	620		1
04688	4-Bromophenyl-phenylether	101-55-3	21	U	21	210		1
04688	Carbazole	86-74-8	21	U	21	210		1
04688	4-Chloro-3-methylphenol	59-50-7	42	U	42	210		1
04688	4-Chloroaniline	106-47-8	83	U	83	210		1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U	21	210		1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U	21	210		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U	21	210		1
04688	2-Chloronaphthalene	91-58-7	21	U	21	210		1
04688	2-Chlorophenol	95-57-8	21	U	21	210		1
04688	4-Chlorophenyl-phenylether	7005-72-3	42	U	42	210		1
04688	Dibenzofuran	132-64-9	21	U	21	210		1
04688	1,2-Dichlorobenzene	95-50-1	21	U	21	210		1
04688	1,3-Dichlorobenzene	541-73-1	21	U	21	210		1
04688	1,4-Dichlorobenzene	106-46-7	21	U	21	210		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	420		1
04688	2,4-Dichlorophenol	120-83-2	21	U	21	210		1
04688	2,4-Dimethylphenol	105-67-9	42	U	42	210		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	3,5-Dimethylphenol	108-68-9	42	U	42	210		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U	210	620		1
04688	2,4-Dinitrophenol	51-28-5	830	U	830	2,500		1
04688	2,4-Dinitrotoluene	121-14-2	42	U	42	210		1
04688	2,6-Dinitrotoluene	606-20-2	21	U	21	210		1
04688	1,2-Diphenylhydrazine	122-66-7	21	U	21	210		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	87	J	21	420		1
04688	Hexachlorobenzene	118-74-1	21	U	21	210		1
04688	Hexachlorobutadiene	87-68-3	83	U	83	210		1
04688	Hexachlorocyclopentadiene	77-47-4	210	U	210	620		1
04688	Hexachloroethane	67-72-1	21	U	21	210		1
04688	Isophorone	78-59-1	21	U	21	210		1
04688	2-Methylphenol	95-48-7	42	U	42	210		1
04688	4-Methylphenol	106-44-5	42	U	42	210		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	21	U	21	210		1
04688	3-Nitroaniline	99-09-2	42	U	42	210		1
04688	4-Nitroaniline	100-01-6	83	U	83	210		1
04688	Nitrobenzene	98-95-3	21	U	21	210		1
04688	2-Nitrophenol	88-75-5	21	U	21	210		1
04688	4-Nitrophenol	100-02-7	210	U	210	620		1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U	21	210		1
04688	N-Nitrosodiphenylamine	86-30-6	21	U	21	210		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	210	U	210	620		1
04688	Phenol	108-95-2	21	U	21	210		1
04688	1,2,4-Trichlorobenzene	120-82-1	21	U	21	210		1
04688	2,4,5-Trichlorophenol	95-95-4	42	U	42	210		1
04688	2,4,6-Trichlorophenol	88-06-2	42	U	42	210		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.83	U	0.83	2.1		1
10138	Acenaphthylene	208-96-8	0.42	U	0.42	2.1		1
10138	Anthracene	120-12-7	0.42	U	0.42	2.1		1
10138	Benzo(a)anthracene	56-55-3	1.7	J	0.83	2.1		1
10138	Benzo(a)pyrene	50-32-8	2.2		0.83	2.1		1
10138	Benzo(b)fluoranthene	205-99-2	4.0		0.83	2.1		1
10138	Benzo(g,h,i)perylene	191-24-2	1.3	J	0.83	2.1		1
10138	Benzo(k)fluoranthene	207-08-9	1.6	J	0.83	2.1		1
10138	Butylbenzylphthalate	85-68-7	7.5	U	7.5	22		1
10138	Di-n-butylphthalate	84-74-2	7.5	U	7.5	22		1
10138	Chrysene	218-01-9	2.6		0.42	2.1		1
10138	Dibenz(a,h)anthracene	53-70-3	0.83	U	0.83	2.1		1
10138	Diethylphthalate	84-66-2	7.5	U	7.5	22		1
10138	Dimethylphthalate	131-11-3	7.5	U	7.5	22		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Fluoranthene	206-44-0	4.0		0.83	2.1		1
10138	Fluorene	86-73-7	0.83	U	0.83	2.1		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.1	J	0.83	2.1		1
10138	1-Methylnaphthalene	90-12-0	0.83	U	0.83	2.1		1
10138	2-Methylnaphthalene	91-57-6	0.83	U	0.83	2.1		1
10138	Naphthalene	91-20-3	0.84	J	0.83	2.1		1
10138	N-Nitrosodimethylamine	62-75-9	0.83	U	0.83	2.1		1
10138	Di-n-octylphthalate	117-84-0	7.5	U	7.5	22		1
10138	Phenanthrene	85-01-8	2.3		0.83	2.1		1
10138	Pyrene	129-00-0	3.8		0.83	2.1		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	2.0	U	2.0	10		200.32
	Reporting limits were raised due to sample foaming.							
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	94	U	94	190	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	62	U	62	190	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	120	U	120	370	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	120	U	120	370	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	62	U	62	190	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	62	U	62	190	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	62	U	62	190	10000000	1
10132	HMX	2691-41-0	160	U	160	470	10000000	1
10132	Nitrobenzene	98-95-3	62	U	62	190	10000000	1
10132	Nitroglycerin	55-63-0	1,200	U	1,200	3,700	10000000	1
10132	2-Nitrotoluene	88-72-2	120	U	120	190	10000000	1
10132	3-Nitrotoluene	99-08-1	160	U	160	190	10000000	1
10132	4-Nitrotoluene	99-99-0	120	U	120	190	10000000	1
10132	PETN	78-11-5	1,200	U	1,200	3,700	10000000	1
10132	RDX	121-82-4	78	U	78	190	10000000	1
10132	Tetryl	479-45-8	95	U	95	190	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	1,3,5-Trinitrobenzene	99-35-4	62	U	62	190	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	62	U	62	190	10000000	1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.5	U	1.5	4.5		1
10401	Dalapon	75-99-0	5.5	U	5.5	11		1
10401	2,4-DB	94-82-6	0.87	J	0.77	2.1		1
10401	Dicamba	1918-00-9	0.50	U	0.50	1.5		1
10401	Dinoseb	88-85-7	1.0	U	1.0	3.0		1
10401	2,4-DP (Dichlorprop)	120-36-5	1.5	U	1.5	2.1		1
10401	MCPA	94-74-6	190	U	190	310		1
10401	MCPP (Mecoprop)	93-65-2	94	U	94	310		1
10401	2,4,5-T	93-76-5	0.12	U	0.12	0.21		1
10401	2,4,5-TP	93-72-1	0.094	U	0.094	0.21		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for 2,4-DB.
Due to interfering peaks on the chromatogram, the values reported for MCPA, 2,4-DP and 2,4,5-TP represent the lowest reporting limits attainable.

HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	750	U	750	1,900		1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.082	U	0.082	0.21		1
01363	Alpha BHC	319-84-6	0.042	U	0.042	0.21		1
01363	Beta BHC	319-85-7	0.075	U	0.075	0.21		1
01363	Gamma BHC - Lindane	58-89-9	0.042	U	0.042	0.21		1
01363	Chlordane	57-74-9	3.2	U	3.2	4.2		1
01363	p,p-DDD	72-54-8	0.19	U	0.19	0.42		1
01363	p,p-DDE	72-55-9	0.082	U	0.082	0.42		1
01363	p,p-DDT	50-29-3	0.34	U	0.34	0.42		1
01363	Delta BHC	319-86-8	0.045	U	0.045	0.21		1
01363	Dieldrin	60-57-1	0.094	U	0.094	0.42		1
01363	Endosulfan I	959-98-8	0.055	U	0.055	0.21		1
01363	Endosulfan II	33213-65-9	0.082	U	0.082	0.42		1
01363	Endosulfan Sulfate	1031-07-8	0.082	U	0.082	0.42		1
01363	Endrin	72-20-8	0.082	U	0.082	0.42		1
01363	Endrin Aldehyde	7421-93-4	0.12	U	0.12	0.42		1
01363	Endrin Ketone	53494-70-5	0.082	U	0.082	0.42		1
01363	Heptachlor	76-44-8	0.075	U	0.075	0.21		1
01363	Heptachlor Epoxide	1024-57-3	0.079	U	0.079	0.21		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Methoxychlor	72-43-5	0.42	U	0.42	2.1		1
01363	Mirex	2385-85-5	0.11	U	0.11	0.42		1
01363	Toxaphene	8001-35-2	2.7	U	2.7	8.2		1

Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.
Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	4.1		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	4.1		1
10225	Aroclor 5460	11126-42-4	1.9	J	1.2	4.1		1
10225	PCB-1016	12674-11-2	0.41	U	0.41	2.1		1
10225	PCB-1221	11104-28-2	0.62	U	0.62	2.1		1
10225	PCB-1232	11141-16-5	0.65	U	0.65	2.1		1
10225	PCB-1242	53469-21-9	0.62	U	0.62	2.1		1
10225	PCB-1248	12672-29-6	0.41	U	0.41	2.1		1
10225	PCB-1254	11097-69-1	3.4		0.41	2.1		1
10225	PCB-1260	11096-82-5	1.1	J	0.41	2.1		1
10225	PCB-1262	37324-23-5	0.41	U	0.41	2.1		1
10225	PCB-1268	11100-14-4	0.41	U	0.41	2.1		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.50	U	0.50	1.5		1
10199	EFH (C15-C20)	n.a.	0.61	J	0.50	1.5		1
10199	EFH (C21-C30)	n.a.	2.6		0.50	1.5		1
10199	EFH (C30 - C40)	n.a.	9.9		0.50	1.5		1
10199	EFH (C8-C11)	n.a.	0.50	U	0.50	1.5		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	120	U	120	620		1
10501	Isopropanol	67-63-0	140	J	120	620		1
10501	Methanol	67-56-1	520	J	120	620		1

Methanol was detected in the method blank at a concentration of 110 ug/kg. The sample was re-extracted and run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA holding time for this analysis. The data is reported from the second extraction. The methanol result for the original extraction is 160 ug/kg; the ethanol result for the original extraction is <100 ug/kg and the isopropanol result for the original extraction is 120 ug/kg.

GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	6.2	U	6.2	16		1
08283	Ethylene glycol	107-21-1	17	U	17	17		1
08283	Propylene glycol	57-55-6	6.2	U	6.2	16		1
	Reporting limits were raised due to interference from the sample matrix.							
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.9	U	1.9	4.4		1
10318	o-Terphenyl	84-15-1	1.9	U	1.9	4.4		1
10318	p-Terphenyl	92-94-4	1.9	U	1.9	4.4		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	18,800		6.27	24.9		1
07914	Boron	7440-42-8	9.74		1.11	6.23		1
01650	Calcium	7440-70-2	27,500		7.64	24.9		1
01654	Iron	7439-89-6	22,700		5.87	24.9		1
01656	Lithium	7439-93-2	22.7		0.27	2.5		1
01657	Magnesium	7439-95-4	6,260		3.17	12.5		1
06958	Manganese	7439-96-5	292		0.0973	0.623		1
10145	Phosphorus	7723-14-0	534		0.698	12.5		1
01662	Potassium	7440-09-7	4,650		22.4	62.3		1
01667	Sodium	7440-23-5	133		46.5	125		1
07968	Strontium	7440-24-6	58.9		0.0773	0.623		1
06969	Tin	7440-31-5	2.21	J	1.25	12.5		1
06970	Titanium	7440-32-6	1,270		0.474	1.25		1
10146	Zirconium	7440-67-7	1.94	J	1.05	6.23		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0895	J	0.0741	0.247		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.93		0.0741	0.494		2
06126	Barium	7440-39-3	109		0.133	0.494		2
06127	Beryllium	7440-41-7	0.513		0.0198	0.123		2
06128	Cadmium	7440-43-9	0.256		0.0444	0.123		2
06131	Chromium	7440-47-3	23.6		0.148	0.494		2
06132	Cobalt	7440-48-4	7.12		0.0247	0.123		2
06133	Copper	7440-50-8	13.6		0.0784	0.475		2
06135	Lead	7439-92-1	7.69		0.0128	0.247		2
06138	Molybdenum	7439-98-7	0.459		0.0617	0.123		2
06139	Nickel	7440-02-0	14.4		0.123	0.494		2
06141	Selenium	7782-49-2	0.188	J	0.0494	0.494		2
06142	Silver	7440-22-4	0.0289	J	0.0148	0.123		2
06145	Thallium	7440-28-0	0.296		0.0370	0.123		2
06148	Vanadium	7440-62-2	56.9		0.0261	0.119		2
06149	Zinc	7440-66-6	78.1		0.691	3.70		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL114 SDG#: DE051-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 7471A**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0035	U	0.0035	0.123		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3		1.0	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.0	U	1.0	1.9		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.2	U	11.2	37.4		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.36	J	0.25	1.2		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	21a Cyanide by 9012B	57-12-5	0.21	U	0.21	0.60		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.	n.a.	443		10.0	10.0		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.21		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3 "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.	n.a.	19.8		0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103621AA	12/28/2010 17:09	Chelsea B Eastep	0.8
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103631AA	12/29/2010 10:51	Jason M Long	20.66

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL114 SDG#: DE051-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:31	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035723411	12/23/2010 17:29	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011 17:34	Timothy J Trees	5
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 05:09	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 14:59	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10357A34B	12/27/2010 20:27	Carrie E Miller	200.32
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:28	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103650008A	01/06/2011 06:39	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103610005A	12/29/2010 19:27	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 08:04	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 20:03	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 08:21	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103610005A	12/27/2010 15:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103650008A	01/03/2011 16:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 20:11	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103640014A	12/30/2010 17:42	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103630032A	12/29/2010 21:13	Robert Brown	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103640012A	01/05/2011 08:49	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103640012A	12/31/2010 00:30	David V Hershey Jr	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103630032A	12/29/2010 17:00	Tyler O Griffin	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103640014A	12/30/2010 13:30	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL114 SDG#: DE051-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:26	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:11	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:40	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:11	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:11	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:40	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:11	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:34	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 14:05	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11013013201B	01/14/2011 14:05	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 00:23	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11017243201A	01/20/2011 21:32	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	2	11004102201A	01/04/2011 19:08	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11004102201A	01/04/2011 09:15	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: **SL-114-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173171
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL114 SDG#: DE051-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173172
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL102 SDG#: DE051-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	560		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	560		1
04688	Benzyl alcohol	100-51-6	190	U	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	75	U	75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560		1
04688	2,4-Dinitrophenol	51-28-5	750	U	750	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	75	U	75	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	560		1
04688	Phenol	108-95-2	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173172
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL102 SDG#: DE051-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.75	U	0.75	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.75	U	0.75	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.75	U	0.75	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.75	U	0.75	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U	0.75	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U	0.75	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.8	U	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	7.2	J	6.8	20		1
10138	Chrysene	218-01-9	0.38	U	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U	0.75	1.9		1
10138	Diethylphthalate	84-66-2	7.7	J	6.8	20		1
10138	Dimethylphthalate	131-11-3	6.8	U	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.8	U	6.8	20		1
10138	Fluoranthene	206-44-0	0.75	U	0.75	1.9		1
10138	Fluorene	86-73-7	0.75	U	0.75	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	U	0.75	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.75	U	0.75	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.75	U	0.75	1.9		1
10138	Naphthalene	91-20-3	0.75	U	0.75	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U	0.75	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.8	U	6.8	20		1
10138	Phenanthrene	85-01-8	0.75	U	0.75	1.9		1
10138	Pyrene	129-00-0	0.75	U	0.75	1.9		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1		1
10401	Dalapon	75-99-0	5.0	U	5.0	10		1
10401	2,4-DB	94-82-6	1.2	J	0.70	1.9		1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.4		1
10401	Dinoseb	88-85-7	0.90	U	0.90	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U	0.90	1.9		1
10401	MCPA	94-74-6	86	U	86	280		1
10401	MCPP (Mecoprop)	93-65-2	85	U	85	280		1
10401	2,4,5-T	93-76-5	0.093	U	0.093	0.19		1
10401	2,4,5-TP	93-72-1	0.085	U	0.085	0.19		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173172
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL102 SDG#: DE051-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
2,4-DB.								
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.075	U	0.075	0.19		1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.19		1
01363	Beta BHC	319-85-7	0.068	U	0.068	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.038	U	0.038	0.19		1
01363	Chlordane	57-74-9	0.90	U	0.90	3.8		1
01363	p,p-DDD	72-54-8	0.075	U	0.075	0.38		1
01363	p,p-DDE	72-55-9	0.075	U	0.075	0.38		1
01363	p,p-DDT	50-29-3	0.075	U	0.075	0.38		1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.075	U	0.075	0.38		1
01363	Endosulfan I	959-98-8	0.050	U	0.050	0.19		1
01363	Endosulfan II	33213-65-9	0.075	U	0.075	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.075	U	0.075	0.38		1
01363	Endrin	72-20-8	0.075	U	0.075	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.075	U	0.075	0.38		1
01363	Endrin Ketone	53494-70-5	0.075	U	0.075	0.38		1
01363	Heptachlor	76-44-8	0.068	U	0.068	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.038	U	0.038	0.19		1
01363	Methoxychlor	72-43-5	0.38	U	0.38	1.9		1
01363	Mirex	2385-85-5	0.075	U	0.075	0.38		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.5		1
Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.								
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9		1
10225	PCB-1232	11141-16-5	0.59	U	0.59	1.9		1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37	U	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.37	U	0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9		1
Metals	**SW-846 6010B**		mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	16,000		5.47	21.7		1
07914	Boron	7440-42-8	4.70	J	0.967	5.43		1
01650	Calcium	7440-70-2	4,940		6.66	21.7		1
01654	Iron	7439-89-6	21,000		5.12	21.7		1
01656	Lithium	7439-93-2	22.7		0.24	2.2		1
01657	Magnesium	7439-95-4	4,600		2.76	10.9		1
06958	Manganese	7439-96-5	304		0.0847	0.543		1
10145	Phosphorus	7723-14-0	344		0.608	10.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173172
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL102 SDG#: DE051-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01662	Potassium	7440-09-7	3,290		19.6	54.3		1
01667	Sodium	7440-23-5	118		40.5	109		1
07968	Strontium	7440-24-6	24.5		0.0674	0.543		1
06969	Tin	7440-31-5	2.27	J	1.09	10.9		1
06970	Titanium	7440-32-6	1,150		0.413	1.09		1
10146	Zirconium	7440-67-7	2.04	J	0.913	5.43		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.134	J	0.0665	0.222		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.55		0.0665	0.443		2
06126	Barium	7440-39-3	108		0.120	0.443		2
06127	Beryllium	7440-41-7	0.659		0.0177	0.111		2
06128	Cadmium	7440-43-9	0.367		0.0399	0.111		2
06131	Chromium	7440-47-3	30.9		0.133	0.443		2
06132	Cobalt	7440-48-4	7.79		0.0222	0.111		2
06133	Copper	7440-50-8	14.5		0.0738	0.448		2
06135	Lead	7439-92-1	9.32		0.0115	0.222		2
06138	Molybdenum	7439-98-7	15.9		0.0554	0.111		2
06139	Nickel	7440-02-0	24.0		0.111	0.443		2
06141	Selenium	7782-49-2	0.195	J	0.0443	0.443		2
06142	Silver	7440-22-4	0.0333	J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.323		0.0332	0.111		2
06148	Vanadium	7440-62-2	50.9		0.0246	0.112		2
06149	Zinc	7440-66-6	113		0.620	3.32		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0763	J	0.0031	0.108		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3		0.90	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2	U	10.2	33.9		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.32	J	0.23	1.1		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	415		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173172
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL102 SDG#: DE051-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.71	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	11.5	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 05:44	Gregory J Drahovsky	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 15:32	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 08:32	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 20:17	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 08:40	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173172
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL102 SDG#: DE051-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:30	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:14	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06133	Copper	SW-846 6020	2	110101026002A	01/12/2011 09:42	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:14	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:14	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:42	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:14	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:35	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 14:19	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 00:47	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 21:51	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173173
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL124 SDG#: DE051-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	210	U	210	630		1
04688	Benzidine	92-87-5	1,500	U	1,500	4,200		1
04688	Benzoic acid	65-85-0	210	U	210	630		1
04688	Benzyl alcohol	100-51-6	210	U	210	630		1
04688	4-Bromophenyl-phenylether	101-55-3	21	U	21	210		1
04688	Carbazole	86-74-8	21	U	21	210		1
04688	4-Chloro-3-methylphenol	59-50-7	42	U	42	210		1
04688	4-Chloroaniline	106-47-8	84	U	84	210		1
04688	bis(2-Chloroethoxy)methane	111-91-1	21	U	21	210		1
04688	bis(2-Chloroethyl)ether	111-44-4	21	U	21	210		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	21	U	21	210		1
04688	2-Chloronaphthalene	91-58-7	21	U	21	210		1
04688	2-Chlorophenol	95-57-8	21	U	21	210		1
04688	4-Chlorophenyl-phenylether	7005-72-3	42	U	42	210		1
04688	Dibenzofuran	132-64-9	21	U	21	210		1
04688	1,2-Dichlorobenzene	95-50-1	21	U	21	210		1
04688	1,3-Dichlorobenzene	541-73-1	21	U	21	210		1
04688	1,4-Dichlorobenzene	106-46-7	21	U	21	210		1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U	130	420		1
04688	2,4-Dichlorophenol	120-83-2	21	U	21	210		1
04688	2,4-Dimethylphenol	105-67-9	42	U	42	210		1
04688	3,5-Dimethylphenol	108-68-9	42	U	42	210		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	210	U	210	630		1
04688	2,4-Dinitrophenol	51-28-5	840	U	840	2,500		1
04688	2,4-Dinitrotoluene	121-14-2	42	U	42	210		1
04688	2,6-Dinitrotoluene	606-20-2	21	U	21	210		1
04688	1,2-Diphenylhydrazine	122-66-7	21	U	21	210		1
04688	Hexachlorobenzene	118-74-1	21	U	21	210		1
04688	Hexachlorobutadiene	87-68-3	84	U	84	210		1
04688	Hexachlorocyclopentadiene	77-47-4	210	U	210	630		1
04688	Hexachloroethane	67-72-1	21	U	21	210		1
04688	Isophorone	78-59-1	21	U	21	210		1
04688	2-Methylphenol	95-48-7	42	U	42	210		1
04688	4-Methylphenol	106-44-5	42	U	42	210		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	21	U	21	210		1
04688	3-Nitroaniline	99-09-2	42	U	42	210		1
04688	4-Nitroaniline	100-01-6	84	U	84	210		1
04688	Nitrobenzene	98-95-3	21	U	21	210		1
04688	2-Nitrophenol	88-75-5	21	U	21	210		1
04688	4-Nitrophenol	100-02-7	210	U	210	630		1
04688	N-Nitroso-di-n-propylamine	621-64-7	21	U	21	210		1
04688	N-Nitrosodiphenylamine	86-30-6	21	U	21	210		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	210	U	210	630		1
04688	Phenol	108-95-2	21	U	21	210		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173173
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL124 SDG#: DE051-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	21	U	21	210		1
04688	2,4,5-Trichlorophenol	95-95-4	42	U	42	210		1
04688	2,4,6-Trichlorophenol	88-06-2	42	U	42	210		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.84	U	0.84	2.1		1
10138	Acenaphthylene	208-96-8	0.42	U	0.42	2.1		1
10138	Anthracene	120-12-7	0.42	U	0.42	2.1		1
10138	Benzo(a)anthracene	56-55-3	1.3	J	0.84	2.1		1
10138	Benzo(a)pyrene	50-32-8	1.3	J	0.84	2.1		1
10138	Benzo(b)fluoranthene	205-99-2	2.6		0.84	2.1		1
10138	Benzo(g,h,i)perylene	191-24-2	0.84	U	0.84	2.1		1
10138	Benzo(k)fluoranthene	207-08-9	0.85	J	0.84	2.1		1
10138	Butylbenzylphthalate	85-68-7	7.5	U	7.5	23		1
10138	Di-n-butylphthalate	84-74-2	12	J	7.5	23		1
10138	Chrysene	218-01-9	1.6	J	0.42	2.1		1
10138	Dibenz(a,h)anthracene	53-70-3	0.84	U	0.84	2.1		1
10138	Diethylphthalate	84-66-2	7.5	U	7.5	23		1
10138	Dimethylphthalate	131-11-3	7.5	U	7.5	23		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	7.5	U	7.5	23		1
10138	Fluoranthene	206-44-0	2.3		0.84	2.1		1
10138	Fluorene	86-73-7	0.84	U	0.84	2.1		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.84	U	0.84	2.1		1
10138	1-Methylnaphthalene	90-12-0	0.84	U	0.84	2.1		1
10138	2-Methylnaphthalene	91-57-6	0.84	U	0.84	2.1		1
10138	Naphthalene	91-20-3	0.84	U	0.84	2.1		1
10138	N-Nitrosodimethylamine	62-75-9	0.84	U	0.84	2.1		1
10138	Di-n-octylphthalate	117-84-0	7.5	U	7.5	23		1
10138	Phenanthrene	85-01-8	0.84	U	0.84	2.1		1
10138	Pyrene	129-00-0	2.0	J	0.84	2.1		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.5	U	1.5	4.5		1
10401	Dalapon	75-99-0	5.5	U	5.5	11		1
10401	2,4-DB	94-82-6	0.97	J	0.78	2.1		1
10401	Dicamba	1918-00-9	0.50	U	0.50	1.5		1
10401	Dinoseb	88-85-7	1.0	U	1.0	3.0		1
10401	2,4-DP (Dichlorprop)	120-36-5	1.2	U	1.2	2.1		1
10401	MCPA	94-74-6	95	U	95	310		1
10401	MCPP (Mecoprop)	93-65-2	94	U	94	310		1
10401	2,4,5-T	93-76-5	0.10	U	0.10	0.21		1
10401	2,4,5-TP	93-72-1	0.094	U	0.094	0.21		1

The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.
2,4-DB was detected in the method blank at a concentration of 1.1 ug/l. A reextraction was performed outside the sample hold time. The method blank in the reextraction has no detections for target compounds. Results are reported from the in hold trial data. Similar results were obtained in both extraction for

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173173
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL124 SDG#: DE051-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	2,4-DB.							
	Due to interfering peaks on the chromatogram, the values reported for 2,4-DP represent the lowest reporting limits attainable.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.083	U	0.083	0.21		1
01363	Alpha BHC	319-84-6	0.043	U	0.043	0.21		1
01363	Beta BHC	319-85-7	0.075	U	0.075	0.21		1
01363	Gamma BHC - Lindane	58-89-9	0.043	U	0.043	0.21		1
01363	Chlordane	57-74-9	1.0	U	1.0	4.3		1
01363	p,p-DDD	72-54-8	0.083	U	0.083	0.43		1
01363	p,p-DDE	72-55-9	0.15	U	0.15	0.43		1
01363	p,p-DDT	50-29-3	0.14	U	0.14	0.43		1
01363	Delta BHC	319-86-8	0.045	U	0.045	0.21		1
01363	Dieldrin	60-57-1	0.083	U	0.083	0.43		1
01363	Endosulfan I	959-98-8	0.055	U	0.055	0.21		1
01363	Endosulfan II	33213-65-9	0.083	U	0.083	0.43		1
01363	Endosulfan Sulfate	1031-07-8	0.14	U	0.14	0.43		1
01363	Endrin	72-20-8	0.083	U	0.083	0.43		1
01363	Endrin Aldehyde	7421-93-4	0.083	U	0.083	0.43		1
01363	Endrin Ketone	53494-70-5	0.083	U	0.083	0.43		1
01363	Heptachlor	76-44-8	0.075	U	0.075	0.21		1
01363	Heptachlor Epoxide	1024-57-3	0.043	U	0.043	0.21		1
01363	Methoxychlor	72-43-5	0.43	U	0.43	2.1		1
01363	Mirex	2385-85-5	0.083	U	0.083	0.43		1
01363	Toxaphene	8001-35-2	2.8	U	2.8	8.3		1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported.							
	Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.3	U	1.3	4.1		1
10225	Aroclor 5442	12642-23-8	1.3	U	1.3	4.1		1
10225	Aroclor 5460	11126-42-4	1.4	J	1.3	4.1		1
10225	PCB-1016	12674-11-2	0.41	U	0.41	2.1		1
10225	PCB-1221	11104-28-2	0.63	U	0.63	2.1		1
10225	PCB-1232	11141-16-5	0.65	U	0.65	2.1		1
10225	PCB-1242	53469-21-9	0.63	U	0.63	2.1		1
10225	PCB-1248	12672-29-6	22		0.41	2.1		1
10225	PCB-1254	11097-69-1	0.41	U	0.41	2.1		1
10225	PCB-1260	11096-82-5	1.2	J	0.41	2.1		1
10225	PCB-1262	37324-23-5	0.41	U	0.41	2.1		1
10225	PCB-1268	11100-14-4	0.41	U	0.41	2.1		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,800		6.06	24.1		1
07914	Boron	7440-42-8	4.85	J	1.07	6.02		1
01650	Calcium	7440-70-2	4,630		7.39	24.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173173
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL124 SDG#: DE051-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01654	Iron	7439-89-6	20,000		5.68	24.1		1
01656	Lithium	7439-93-2	19.4		0.27	2.4		1
01657	Magnesium	7439-95-4	4,210		3.06	12.0		1
06958	Manganese	7439-96-5	266		0.0940	0.602		1
10145	Phosphorus	7723-14-0	362		0.675	12.0		1
01662	Potassium	7440-09-7	2,720		21.7	60.2		1
01667	Sodium	7440-23-5	104	J	44.9	120		1
07968	Strontium	7440-24-6	23.2		0.0747	0.602		1
06969	Tin	7440-31-5	2.26	J	1.20	12.0		1
06970	Titanium	7440-32-6	1,080		0.458	1.20		1
10146	Zirconium	7440-67-7	2.14	J	1.01	6.02		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0752	U	0.0752	0.251		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.86		0.0752	0.501		2
06126	Barium	7440-39-3	94.8		0.135	0.501		2
06127	Beryllium	7440-41-7	0.586		0.0201	0.125		2
06128	Cadmium	7440-43-9	0.158		0.0451	0.125		2
06131	Chromium	7440-47-3	19.8		0.150	0.501		2
06132	Cobalt	7440-48-4	6.01		0.0251	0.125		2
06133	Copper	7440-50-8	7.76		0.0795	0.482		2
06135	Lead	7439-92-1	5.97		0.0130	0.251		2
06138	Molybdenum	7439-98-7	0.579		0.0627	0.125		2
06139	Nickel	7440-02-0	11.7		0.125	0.501		2
06141	Selenium	7782-49-2	0.152	J	0.0501	0.501		2
06142	Silver	7440-22-4	0.0342	J	0.0150	0.125		2
06145	Thallium	7440-28-0	0.277		0.0376	0.125		2
06148	Vanadium	7440-62-2	35.8		0.0265	0.120		2
06149	Zinc	7440-66-6	66.0		0.702	3.76		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0108	J	0.0035	0.120		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.4		1.0	1.3		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.3	U	11.3	37.6		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.25	J	0.25	1.3		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	433		10.0	10.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173173
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL124 SDG#: DE051-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.24	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	20.2	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 09:47	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 16:04	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110040014A	01/10/2011 08:59	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	103650029A	01/20/2011 20:32	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 08:58	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	103650029A	01/04/2011 06:30	Joseph S Feister	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110040014A	01/04/2011 23:30	David V Hershey Jr	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173173
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL124 SDG#: DE051-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:34	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:17	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:17	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:17	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:17	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:36	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 15:02	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 01:10	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 22:03	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15745 SDG#: DE051-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	58		6.4	7.6		0.87
06192	Benzene	71-43-2	0.1	U	0.1	3.8		0.87
06192	Bromobenzene	108-86-1	0.12	U	0.12	3.8		0.87
06192	Bromochloromethane	74-97-5	0.31	U	0.31	3.8		0.87
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	3.8		0.87
06192	Bromoform	75-25-2	0.38	U	0.38	3.8		0.87
06192	Bromomethane	74-83-9	0.24	U	0.24	3.8		0.87
06192	2-Butanone	78-93-3	7.6		1.2	7.6		0.87
06192	n-Butylbenzene	104-51-8	0.11	U	0.11	3.8		0.87
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	3.8		0.87
06192	tert-Butylbenzene	98-06-6	0.15	U	0.15	3.8		0.87
06192	Carbon Tetrachloride	56-23-5	0.13	U	0.13	3.8		0.87
06192	Chlorobenzene	108-90-7	0.10	U	0.10	3.8		0.87
06192	Chloroethane	75-00-3	0.12	U	0.12	3.8		0.87
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.29	U	0.29	3.8		0.87
06192	Chloroform	67-66-3	0.11	U	0.11	3.8		0.87
06192	Chloromethane	74-87-3	0.31	U	0.31	3.8		0.87
06192	2-Chlorotoluene	95-49-8	0.13	U	0.13	3.8		0.87
06192	4-Chlorotoluene	106-43-4	0.13	U	0.13	3.8		0.87
06192	Chlorotrifluoroethene	79-38-9	0.48	U	0.48	4.7		0.87
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.67	U	0.67	3.8		0.87
06192	Dibromochloromethane	124-48-1	0.19	U	0.19	3.8		0.87
06192	1,2-Dibromoethane	106-93-4	0.16	U	0.16	3.8		0.87
06192	Dibromomethane	74-95-3	0.23	U	0.23	3.8		0.87
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	3.8		0.87
06192	1,3-Dichlorobenzene	541-73-1	0.11	U	0.11	3.8		0.87
06192	1,4-Dichlorobenzene	106-46-7	0.15	U	0.15	3.8		0.87
06192	Dichlorodifluoromethane	75-71-8	0.11	U	0.11	3.8		0.87
06192	1,1-Dichloroethane	75-34-3	0.1	U	0.1	3.8		0.87
06192	1,2-Dichloroethane	107-06-2	0.14	U	0.14	3.8		0.87
06192	1,1-Dichloroethene	75-35-4	0.37	U	0.37	3.8		0.87
06192	cis-1,2-Dichloroethene	156-59-2	0.18	U	0.18	3.8		0.87
06192	trans-1,2-Dichloroethene	156-60-5	0.11	U	0.11	3.8		0.87
06192	1,2-Dichloropropane	78-87-5	0.16	U	0.16	3.8		0.87
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	3.8		0.87
06192	2,2-Dichloropropane	594-20-7	0.16	U	0.16	3.8		0.87
06192	1,1-Dichloropropene	563-58-6	0.12	U	0.12	3.8		0.87
06192	cis-1,3-Dichloropropene	10061-01-5	0.15	U	0.15	3.8		0.87
06192	trans-1,3-Dichloropropene	10061-02-6	0.16	U	0.16	3.8		0.87
06192	Ethylbenzene	100-41-4	0.06	U	0.06	3.8		0.87
06192	Freon 113	76-13-1	0.10	U	0.10	3.8		0.87
06192	Freon 133a	75-88-7	0.48	U	0.48	4.7		0.87
06192	Hexachlorobutadiene	87-68-3	0.13	U	0.13	3.8		0.87
06192	2-Hexanone	591-78-6	1.5	U	1.5	7.6		0.87
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	3.8		0.87
06192	p-Isopropyltoluene	99-87-6	0.10	U	0.10	3.8		0.87
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.20	U	0.20	3.8		0.87
06192	4-Methyl-2-pentanone	108-10-1	0.37	U	0.37	7.6		0.87
06192	Methylene Chloride	75-09-2	3.8	J	0.23	3.8		0.87
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	3.8		0.87

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15745 SDG#: DE051-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.1	U	0.1	3.8		0.87
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.10	U	0.10	3.8		0.87
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22	U	0.22	3.8		0.87
06192	Tetrachloroethene	127-18-4	0.19	U	0.19	3.8		0.87
06192	Toluene	108-88-3	0.09	J	0.08	3.8		0.87
06192	1,2,3-Trichlorobenzene	87-61-6	0.13	U	0.13	3.8		0.87
06192	1,2,4-Trichlorobenzene	120-82-1	0.17	U	0.17	3.8		0.87
06192	1,1,1-Trichloroethane	71-55-6	0.19	U	0.19	3.8		0.87
06192	1,1,2-Trichloroethane	79-00-5	0.26	U	0.26	3.8		0.87
06192	Trichloroethene	79-01-6	0.14	U	0.14	3.8		0.87
06192	Trichlorofluoromethane	75-69-4	0.28	U	0.28	3.8		0.87
06192	1,2,3-Trichloropropane	96-18-4	0.31	U	0.31	3.8		0.87
06192	1,2,4-Trimethylbenzene	95-63-6	0.38	U	0.38	3.8		0.87
06192	1,3,5-Trimethylbenzene	108-67-8	0.1	U	0.1	3.8		0.87
06192	Vinyl Chloride	75-01-4	0.19	U	0.19	3.8		0.87
06192	m+p-Xylene	179601-23-1	0.16	U	0.16	3.8		0.87
06192	o-Xylene	95-47-6	0.16	U	0.16	3.8		0.87
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.1	U	5.1	15		23.36
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15745 SDG#: DE051-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	37	U	37	180		1
04688	4-Methylphenol	106-44-5	37	U	37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	37	U	37	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.8		1
10138	Anthracene	120-12-7	0.37	U	0.37	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U	6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U	6.6	20		1
10138	Chrysene	218-01-9	0.37	U	0.37	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U	6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U	6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.6	U	6.6	20		1
10138	Fluoranthene	206-44-0	0.73	U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U	0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15745 SDG#: DE051-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6	U	6.6	20		1
10138	Phenanthrene	85-01-8	0.73	U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73	U	0.73	1.8		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9		1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.9		1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.36	U	0.36	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,000		5.26	20.9		1
07914	Boron	7440-42-8	3.70	J	0.930	5.23		1
01650	Calcium	7440-70-2	2,180		6.41	20.9		1
01654	Iron	7439-89-6	19,000		4.92	20.9		1
01656	Lithium	7439-93-2	22.5		0.23	2.1		1
01657	Magnesium	7439-95-4	4,010		2.66	10.5		1
06958	Manganese	7439-96-5	287		0.0815	0.523		1
10145	Phosphorus	7723-14-0	391		0.585	10.5		1
01662	Potassium	7440-09-7	2,800		18.8	52.3		1
01667	Sodium	7440-23-5	113		39.0	105		1
07968	Strontium	7440-24-6	14.9		0.0648	0.523		1
06969	Tin	7440-31-5	2.24	J	1.05	10.5		1
06970	Titanium	7440-32-6	1,010		0.397	1.05		1
10146	Zirconium	7440-67-7	1.84	J	0.878	5.23		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0639	U	0.0639	0.213		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.63		0.0639	0.426		2
06126	Barium	7440-39-3	89.8		0.115	0.426		2
06127	Beryllium	7440-41-7	0.576		0.0171	0.107		2
06128	Cadmium	7440-43-9	0.139		0.0384	0.107		2
06131	Chromium	7440-47-3	17.8		0.128	0.426		2
06132	Cobalt	7440-48-4	5.81		0.0213	0.107		2
06133	Copper	7440-50-8	9.36		0.0697	0.422		2
06135	Lead	7439-92-1	5.81		0.0111	0.213		2
06138	Molybdenum	7439-98-7	0.668		0.0533	0.107		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15745 SDG#: DE051-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06139	Nickel	7440-02-0	11.9	0.107	0.426		2
06141	Selenium	7782-49-2	0.146 J	0.0426	0.426		2
06142	Silver	7440-22-4	0.0237 J	0.0128	0.107		2
06145	Thallium	7440-28-0	0.264	0.0320	0.107		2
06148	Vanadium	7440-62-2	41.5	0.0232	0.106		2
06149	Zinc	7440-66-6	52.8	0.597	3.20		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0042 J	0.0031	0.110		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.7	0.88	1.1		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	32.9		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.40 J	0.22	1.1		1
	ASTM D1498		**mV**	**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	412	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.66	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	8.9	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-157-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15745 SDG#: DE051-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103621AA	12/28/2010 17:32	Chelsea B Eastep	0.87
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103631AA	12/29/2010 11:11	Jason M Long	23.36
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:37	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035723411	12/23/2010 17:34	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 10:22	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 16:37	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 09:17	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:38	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:20	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:46	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:20	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:20	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:46	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:20	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:37	Nelli S Markaryan	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173174
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15745 SDG#: DE051-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 15:16	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 01:33	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 22:15	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15845 SDG#: DE051-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	7.1	U	7.1	8.5		0.96
06192	Benzene	71-43-2	0.11	U	0.11	4.2		0.96
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.2		0.96
06192	Bromochloromethane	74-97-5	0.35	U	0.35	4.2		0.96
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.2		0.96
06192	Bromoform	75-25-2	0.42	U	0.42	4.2		0.96
06192	Bromomethane	74-83-9	0.26	U	0.26	4.2		0.96
06192	2-Butanone	78-93-3	1.3	U	1.3	8.5		0.96
06192	n-Butylbenzene	104-51-8	0.13	U	0.13	4.2		0.96
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.2		0.96
06192	tert-Butylbenzene	98-06-6	0.17	U	0.17	4.2		0.96
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.2		0.96
06192	Chlorobenzene	108-90-7	0.12	U	0.12	4.2		0.96
06192	Chloroethane	75-00-3	0.14	U	0.14	4.2		0.96
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.32	U	0.32	4.2		0.96
06192	Chloroform	67-66-3	0.13	U	0.13	4.2		0.96
06192	Chloromethane	74-87-3	0.35	U	0.35	4.2		0.96
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.2		0.96
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.2		0.96
06192	Chlorotrifluoroethene	79-38-9	0.53	U	0.53	5.3		0.96
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.74	U	0.74	4.2		0.96
06192	Dibromochloromethane	124-48-1	0.21	U	0.21	4.2		0.96
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.2		0.96
06192	Dibromomethane	74-95-3	0.25	U	0.25	4.2		0.96
06192	1,2-Dichlorobenzene	95-50-1	0.1	U	0.1	4.2		0.96
06192	1,3-Dichlorobenzene	541-73-1	0.13	U	0.13	4.2		0.96
06192	1,4-Dichlorobenzene	106-46-7	0.17	U	0.17	4.2		0.96
06192	Dichlorodifluoromethane	75-71-8	0.13	U	0.13	4.2		0.96
06192	1,1-Dichloroethane	75-34-3	0.11	U	0.11	4.2		0.96
06192	1,2-Dichloroethane	107-06-2	0.16	U	0.16	4.2		0.96
06192	1,1-Dichloroethene	75-35-4	0.41	U	0.41	4.2		0.96
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.2		0.96
06192	trans-1,2-Dichloroethene	156-60-5	0.13	U	0.13	4.2		0.96
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.2		0.96
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.2		0.96
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.2		0.96
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.2		0.96
06192	cis-1,3-Dichloropropene	10061-01-5	0.17	U	0.17	4.2		0.96
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.2		0.96
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.2		0.96
06192	Freon 113	76-13-1	0.12	U	0.12	4.2		0.96
06192	Freon 133a	75-88-7	0.53	U	0.53	5.3		0.96
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.2		0.96
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.5		0.96
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.2		0.96
06192	p-Isopropyltoluene	99-87-6	0.12	U	0.12	4.2		0.96
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22	U	0.22	4.2		0.96
06192	4-Methyl-2-pentanone	108-10-1	0.41	U	0.41	8.5		0.96
06192	Methylene Chloride	75-09-2	0.41	J	0.25	4.2		0.96
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.2		0.96

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15845 SDG#: DE051-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.11	U	0.11	4.2		0.96
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12	U	0.12	4.2		0.96
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24	U	0.24	4.2		0.96
06192	Tetrachloroethene	127-18-4	0.21	U	0.21	4.2		0.96
06192	Toluene	108-88-3	0.13	J	0.08	4.2		0.96
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.2		0.96
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.2		0.96
06192	1,1,1-Trichloroethane	71-55-6	0.21	U	0.21	4.2		0.96
06192	1,1,2-Trichloroethane	79-00-5	0.29	U	0.29	4.2		0.96
06192	Trichloroethene	79-01-6	0.16	U	0.16	4.2		0.96
06192	Trichlorofluoromethane	75-69-4	0.31	U	0.31	4.2		0.96
06192	1,2,3-Trichloropropane	96-18-4	0.35	U	0.35	4.2		0.96
06192	1,2,4-Trimethylbenzene	95-63-6	0.42	U	0.42	4.2		0.96
06192	1,3,5-Trimethylbenzene	108-67-8	0.11	U	0.11	4.2		0.96
06192	Vinyl Chloride	75-01-4	0.21	U	0.21	4.2		0.96
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.2		0.96
06192	o-Xylene	95-47-6	0.18	U	0.18	4.2		0.96
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.5	U	5.5	17		24.85
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180		1
04688	4-Chloroaniline	106-47-8	74	U	74	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1
04688	2,4-Dinitrophenol	51-28-5	740	U	740	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15845 SDG#: DE051-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	74	U	74	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	37	U	37	180		1
04688	4-Methylphenol	106-44-5	37	U	37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	37	U	37	180		1
04688	4-Nitroaniline	100-01-6	74	U	74	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.74	U	0.74	1.8		1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.8		1
10138	Anthracene	120-12-7	0.37	U	0.37	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.74	U	0.74	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.74	U	0.74	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.74	U	0.74	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.74	U	0.74	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.74	U	0.74	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.7	U	6.7	20		1
10138	Di-n-butylphthalate	84-74-2	8.2	J	6.7	20		1
10138	Chrysene	218-01-9	0.37	U	0.37	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.74	U	0.74	1.8		1
10138	Diethylphthalate	84-66-2	6.7	U	6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7	U	6.7	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.7	U	6.7	20		1
10138	Fluoranthene	206-44-0	0.74	U	0.74	1.8		1
10138	Fluorene	86-73-7	0.74	U	0.74	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.74	U	0.74	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.74	U	0.74	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.74	U	0.74	1.8		1
10138	Naphthalene	91-20-3	0.74	U	0.74	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15845 SDG#: DE051-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	N-Nitrosodimethylamine	62-75-9	0.74	U	0.74	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.7	U	6.7	20		1
10138	Phenanthrene	85-01-8	0.74	U	0.74	1.8		1
10138	Pyrene	129-00-0	0.74	U	0.74	1.8		1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.3	U	2.3	5.5		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9		1
10225	PCB-1232	11141-16-5	0.58	U	0.58	1.9		1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9		1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37	U	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.37	U	0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	14,700		5.58	22.2		1
07914	Boron	7440-42-8	3.92	J	0.987	5.54		1
01650	Calcium	7440-70-2	1,970		6.80	22.2		1
01654	Iron	7439-89-6	18,700		5.22	22.2		1
01656	Lithium	7439-93-2	22.7		0.24	2.2		1
01657	Magnesium	7439-95-4	3,790		2.82	11.1		1
06958	Manganese	7439-96-5	300		0.0865	0.554		1
10145	Phosphorus	7723-14-0	397		0.621	11.1		1
01662	Potassium	7440-09-7	3,350		20.0	55.4		1
01667	Sodium	7440-23-5	111		41.4	111		1
07968	Strontium	7440-24-6	15.6		0.0687	0.554		1
06969	Tin	7440-31-5	2.35	J	1.11	11.1		1
06970	Titanium	7440-32-6	1,050		0.421	1.11		1
10146	Zirconium	7440-67-7	2.09	J	0.931	5.54		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0659	U	0.0659	0.220		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.34		0.0659	0.439		2
06126	Barium	7440-39-3	97.7		0.119	0.439		2
06127	Beryllium	7440-41-7	0.631		0.0176	0.110		2
06128	Cadmium	7440-43-9	0.183		0.0395	0.110		2
06131	Chromium	7440-47-3	18.5		0.132	0.439		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15845 SDG#: DE051-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06132	Cobalt	7440-48-4	7.13	0.0220	0.110		2
06133	Copper	7440-50-8	11.1	0.0724	0.439		2
06135	Lead	7439-92-1	6.78	0.0114	0.220		2
06138	Molybdenum	7439-98-7	0.609	0.0549	0.110		2
06139	Nickel	7440-02-0	13.6	0.110	0.439		2
06141	Selenium	7782-49-2	0.162 J	0.0439	0.439		2
06142	Silver	7440-22-4	0.0396 J	0.0132	0.110		2
06145	Thallium	7440-28-0	0.286	0.0329	0.110		2
06148	Vanadium	7440-62-2	38.5	0.0241	0.110		2
06149	Zinc	7440-66-6	61.4	0.615	3.29		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0048 J	0.0031	0.107		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.4	0.89	1.1		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10 U	10	33.3		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.51 J	0.22	1.1		1
	ASTM D1498		**mV**	**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	490	10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.33	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	9.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-158-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15845 SDG#: DE051-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103621AA	12/28/2010 17:54	Chelsea B Eastep	0.96
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103631AA	12/29/2010 11:31	Jason M Long	24.85
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:41	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:55	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035723411	12/23/2010 17:56	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035723411	12/23/2010 17:39	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 10:57	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/13/2011 17:09	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	110040016A	01/05/2011 16:44	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 09:35	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	110040016A	01/05/2011 09:45	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:42	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:23	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:48	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:23	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:23	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173175
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15845 SDG#: DE051-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:48	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:23	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:38	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 15:30	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 01:56	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 22:28	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173176
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15891 SDG#: DE051-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	560		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U	190	560		1
04688	Benzyl alcohol	100-51-6	190	U	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190		1
04688	4-Chloroaniline	106-47-8	74	U	74	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560		1
04688	2,4-Dinitrophenol	51-28-5	740	U	740	2,200		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	74	U	74	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	37	U	37	190		1
04688	4-Methylphenol	106-44-5	37	U	37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	37	U	37	190		1
04688	4-Nitroaniline	100-01-6	74	U	74	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	560		1
04688	Phenol	108-95-2	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173176
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15891 SDG#: DE051-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.74	U	0.74	1.9		1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.9		1
10138	Anthracene	120-12-7	0.37	U	0.37	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.74	U	0.74	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.74	U	0.74	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.74	U	0.74	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.74	U	0.74	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.74	U	0.74	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.7	U	6.7	20		1
10138	Di-n-butylphthalate	84-74-2	6.7	U	6.7	20		1
10138	Chrysene	218-01-9	0.37	U	0.37	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.74	U	0.74	1.9		1
10138	Diethylphthalate	84-66-2	6.7	U	6.7	20		1
10138	Dimethylphthalate	131-11-3	6.7	U	6.7	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	9.4	J	6.7	20		1
10138	Fluoranthene	206-44-0	0.74	U	0.74	1.9		1
10138	Fluorene	86-73-7	0.74	U	0.74	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.74	U	0.74	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.74	U	0.74	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.74	U	0.74	1.9		1
10138	Naphthalene	91-20-3	0.74	U	0.74	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.74	U	0.74	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.7	U	6.7	20		1
10138	Phenanthrene	85-01-8	0.74	U	0.74	1.9		1
10138	Pyrene	129-00-0	0.74	U	0.74	1.9		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9		1
10225	PCB-1232	11141-16-5	0.58	U	0.58	1.9		1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9		1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37	U	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.37	U	0.37	1.9		1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,800		5.55	22.1		1
07914	Boron	7440-42-8	3.90	J	0.982	5.52		1
01650	Calcium	7440-70-2	2,050		6.77	22.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173176
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15891 SDG#: DE051-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01654	Iron	7439-89-6	17,900		5.20	22.1		1
01656	Lithium	7439-93-2	19.5		0.24	2.2		1
01657	Magnesium	7439-95-4	3,380		2.80	11.0		1
06958	Manganese	7439-96-5	268		0.0861	0.552		1
10145	Phosphorus	7723-14-0	246		0.618	11.0		1
01662	Potassium	7440-09-7	2,390		19.9	55.2		1
01667	Sodium	7440-23-5	96.7	J	41.2	110		1
07968	Strontium	7440-24-6	19.5		0.0684	0.552		1
06969	Tin	7440-31-5	2.36	J	1.10	11.0		1
06970	Titanium	7440-32-6	1,020		0.419	1.10		1
10146	Zirconium	7440-67-7	2.05	J	0.927	5.52		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0651	J	0.0643	0.214		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.63		0.0643	0.429		2
06126	Barium	7440-39-3	107		0.116	0.429		2
06127	Beryllium	7440-41-7	0.738		0.0172	0.107		2
06128	Cadmium	7440-43-9	0.128		0.0386	0.107		2
06131	Chromium	7440-47-3	20.2		0.129	0.429		2
06132	Cobalt	7440-48-4	7.28		0.0214	0.107		2
06133	Copper	7440-50-8	11.5		0.0729	0.442		2
06135	Lead	7439-92-1	6.86		0.0111	0.214		2
06138	Molybdenum	7439-98-7	0.629		0.0536	0.107		2
06139	Nickel	7440-02-0	14.1		0.107	0.429		2
06141	Selenium	7782-49-2	0.104	J	0.0429	0.429		2
06142	Silver	7440-22-4	0.0339	J	0.0129	0.107		2
06145	Thallium	7440-28-0	0.311		0.0322	0.107		2
06148	Vanadium	7440-62-2	43.5		0.0243	0.110		2
06149	Zinc	7440-66-6	49.9		0.600	3.22		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0030	U	0.0030	0.106		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.1		0.89	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.0	U	10.0	33.4		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.50	J	0.22	1.1		1
	ASTM D1498		**mV**		**mV**	**mV**	**mV**	
01821	Oxidation Reduction Potential	n.a.	446		10.0	10.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173176
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15891 SDG#: DE051-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**ASTM D1498**		**mV**	**mV**	**mV**	**mV**	
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.02	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	10.3	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011	11:31	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/14/2011	07:41	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011	18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010	06:00	Joseph S Feister	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011	09:54	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010	06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010	10:45	Eric L Eby	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173176
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

15891 SDG#: DE051-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:26	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:49	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:26	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:26	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:49	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:26	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:40	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 15:44	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 02:19	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11017243201A	01/20/2011 22:40	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103A	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403A	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14545 SDG#: DE051-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.3	U	6.3	7.5		0.82
06192	Benzene	71-43-2	0.09	U	0.09	3.7		0.82
06192	Bromobenzene	108-86-1	0.12	U	0.12	3.7		0.82
06192	Bromochloromethane	74-97-5	0.31	U	0.31	3.7		0.82
06192	Bromodichloromethane	75-27-4	0.07	U	0.07	3.7		0.82
06192	Bromoform	75-25-2	0.37	U	0.37	3.7		0.82
06192	Bromomethane	74-83-9	0.23	U	0.23	3.7		0.82
06192	2-Butanone	78-93-3	1.1	U	1.1	7.5		0.82
06192	n-Butylbenzene	104-51-8	0.11	U	0.11	3.7		0.82
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	3.7		0.82
06192	tert-Butylbenzene	98-06-6	0.15	U	0.15	3.7		0.82
06192	Carbon Tetrachloride	56-23-5	0.13	U	0.13	3.7		0.82
06192	Chlorobenzene	108-90-7	0.10	U	0.10	3.7		0.82
06192	Chloroethane	75-00-3	0.12	U	0.12	3.7		0.82
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.28	U	0.28	3.7		0.82
06192	Chloroform	67-66-3	0.11	U	0.11	3.7		0.82
06192	Chloromethane	74-87-3	0.31	U	0.31	3.7		0.82
06192	2-Chlorotoluene	95-49-8	0.13	U	0.13	3.7		0.82
06192	4-Chlorotoluene	106-43-4	0.13	U	0.13	3.7		0.82
06192	Chlorotrifluoroethene	79-38-9	0.47	U	0.47	4.7		0.82
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.66	U	0.66	3.7		0.82
06192	Dibromochloromethane	124-48-1	0.19	U	0.19	3.7		0.82
06192	1,2-Dibromoethane	106-93-4	0.16	U	0.16	3.7		0.82
06192	Dibromomethane	74-95-3	0.22	U	0.22	3.7		0.82
06192	1,2-Dichlorobenzene	95-50-1	0.08	U	0.08	3.7		0.82
06192	1,3-Dichlorobenzene	541-73-1	0.11	U	0.11	3.7		0.82
06192	1,4-Dichlorobenzene	106-46-7	0.15	U	0.15	3.7		0.82
06192	Dichlorodifluoromethane	75-71-8	0.11	U	0.11	3.7		0.82
06192	1,1-Dichloroethane	75-34-3	0.09	U	0.09	3.7		0.82
06192	1,2-Dichloroethane	107-06-2	0.14	U	0.14	3.7		0.82
06192	1,1-Dichloroethene	75-35-4	0.36	U	0.36	3.7		0.82
06192	cis-1,2-Dichloroethene	156-59-2	0.18	U	0.18	3.7		0.82
06192	trans-1,2-Dichloroethene	156-60-5	0.11	U	0.11	3.7		0.82
06192	1,2-Dichloropropane	78-87-5	0.16	U	0.16	3.7		0.82
06192	1,3-Dichloropropane	142-28-9	0.07	U	0.07	3.7		0.82
06192	2,2-Dichloropropane	594-20-7	0.16	U	0.16	3.7		0.82
06192	1,1-Dichloropropene	563-58-6	0.12	U	0.12	3.7		0.82
06192	cis-1,3-Dichloropropene	10061-01-5	0.15	U	0.15	3.7		0.82
06192	trans-1,3-Dichloropropene	10061-02-6	0.16	U	0.16	3.7		0.82
06192	Ethylbenzene	100-41-4	0.06	U	0.06	3.7		0.82
06192	Freon 113	76-13-1	0.10	U	0.10	3.7		0.82
06192	Freon 133a	75-88-7	0.47	U	0.47	4.7		0.82
06192	Hexachlorobutadiene	87-68-3	0.13	U	0.13	3.7		0.82
06192	2-Hexanone	591-78-6	1.5	U	1.5	7.5		0.82
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	3.7		0.82
06192	p-Isopropyltoluene	99-87-6	0.10	U	0.10	3.7		0.82
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.20	U	0.20	3.7		0.82
06192	4-Methyl-2-pentanone	108-10-1	0.36	U	0.36	7.5		0.82
06192	Methylene Chloride	75-09-2	0.38	J	0.22	3.7		0.82
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	3.7		0.82

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14545 SDG#: DE051-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.09	U	0.09	3.7		0.82
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.10	U	0.10	3.7		0.82
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22	U	0.22	3.7		0.82
06192	Tetrachloroethene	127-18-4	0.19	U	0.19	3.7		0.82
06192	Toluene	108-88-3	0.1	J	0.07	3.7		0.82
06192	1,2,3-Trichlorobenzene	87-61-6	0.13	U	0.13	3.7		0.82
06192	1,2,4-Trichlorobenzene	120-82-1	0.17	U	0.17	3.7		0.82
06192	1,1,1-Trichloroethane	71-55-6	0.19	U	0.19	3.7		0.82
06192	1,1,2-Trichloroethane	79-00-5	0.25	U	0.25	3.7		0.82
06192	Trichloroethene	79-01-6	0.14	U	0.14	3.7		0.82
06192	Trichlorofluoromethane	75-69-4	0.27	U	0.27	3.7		0.82
06192	1,2,3-Trichloropropane	96-18-4	0.31	U	0.31	3.7		0.82
06192	1,2,4-Trimethylbenzene	95-63-6	0.37	U	0.37	3.7		0.82
06192	1,3,5-Trimethylbenzene	108-67-8	0.09	U	0.09	3.7		0.82
06192	Vinyl Chloride	75-01-4	0.19	U	0.19	3.7		0.82
06192	m+p-Xylene	179601-23-1	0.16	U	0.16	3.7		0.82
06192	o-Xylene	95-47-6	0.16	U	0.16	3.7		0.82
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.5	U	4.5	13		19.5
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	95.4	U	95.4	191		5
Due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the GC/MS semivolatile compounds were raised.								
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	76	U	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14545 SDG#: DE051-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	760	U	760	2,300		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	76	U	76	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.87	J	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	7.2	J	6.9	21		1
10138	Chrysene	218-01-9	2.2		0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	15	J	6.9	21		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14545 SDG#: DE051-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Fluoranthene	206-44-0	0.76	U	0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.89	J	0.76	1.9		1
10138	Naphthalene	91-20-3	0.90	J	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21		1
10138	Phenanthrene	85-01-8	1.4	J	0.76	1.9		1
10138	Pyrene	129-00-0	0.78	J	0.76	1.9		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1.2		25.93
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	86	U	86	170	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	57	U	57	170	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	110	U	110	340	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	110	U	110	340	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	57	U	57	170	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	57	U	57	170	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	57	U	57	170	10000000	1
10132	HMX	2691-41-0	140	U	140	430	10000000	1
10132	Nitrobenzene	98-95-3	57	U	57	170	10000000	1
10132	Nitroglycerin	55-63-0	1,100	U	1,100	3,400	10000000	1
10132	2-Nitrotoluene	88-72-2	110	U	110	170	10000000	1
10132	3-Nitrotoluene	99-08-1	140	U	140	170	10000000	1
10132	4-Nitrotoluene	99-99-0	110	U	110	170	10000000	1
10132	PETN	78-11-5	1,100	U	1,100	3,400	10000000	1
10132	RDX	121-82-4	72	U	72	170	10000000	1
10132	Tetryl	479-45-8	88	U	88	170	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14545 SDG#: DE051-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	1,3,5-Trinitrobenzene	99-35-4	57	U	57	170	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	57	U	57	170	10000000	1
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	17a Formaldehyde by 8315A	50-00-0	690	U	690	1,700		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.57	U	0.57	1.9		1
10225	PCB-1232	11141-16-5	0.59	U	0.59	1.9		1
10225	PCB-1242	53469-21-9	0.57	U	0.57	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9		1
10225	PCB-1260	11096-82-5	0.38	U	0.38	1.9		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.46	U	0.46	1.4		1
10199	EFH (C15-C20)	n.a.	0.94	J	0.46	1.4		1
10199	EFH (C21-C30)	n.a.	18		0.46	1.4		1
10199	EFH (C30 - C40)	n.a.	53		0.46	1.4		1
10199	EFH (C8-C11)	n.a.	0.46	U	0.46	1.4		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	570		1
10501	Isopropanol	67-63-0	110	U	110	570		1
10501	Methanol	67-56-1	110	U	110	570		1

Methanol was detected in the method blank at a concentration of 110 ug/kg. The sample was re-extracted and run outside the project holding time of 7 days, but within the laboratory holding time of 14 days. There is no formally established EPA holding time for this analysis. The data is reported from the second extraction. The methanol result for the original extraction is 150 ug/kg; the ethanol and isopropanol results for the original extraction are <100 ug/kg.

GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.7	U	5.7	14		1
08283	Ethylene glycol	107-21-1	5.7	U	5.7	14		1
08283	Propylene glycol	57-55-6	5.7	U	5.7	14		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14545 SDG#: DE051-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,700		5.48	21.8		1
07914	Boron	7440-42-8	16.4		0.970	5.45		1
01650	Calcium	7440-70-2	2,780		6.68	21.8		1
01654	Iron	7439-89-6	23,900		5.13	21.8		1
01656	Lithium	7439-93-2	27.5		0.24	2.2		1
01657	Magnesium	7439-95-4	4,170		2.77	10.9		1
06958	Manganese	7439-96-5	242		0.0850	0.545		1
10145	Phosphorus	7723-14-0	246		0.610	10.9		1
01662	Potassium	7440-09-7	2,180		19.6	54.5		1
01667	Sodium	7440-23-5	123		40.6	109		1
07968	Strontium	7440-24-6	25.8		0.0676	0.545		1
06969	Tin	7440-31-5	1.77	J	1.09	10.9		1
06970	Titanium	7440-32-6	1,090		0.414	1.09		1
10146	Zirconium	7440-67-7	2.17	J	0.915	5.45		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.103	J	0.0680	0.227		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	5.98		0.0680	0.453		2
06126	Barium	7440-39-3	125		0.122	0.453		2
06127	Beryllium	7440-41-7	0.852		0.0181	0.113		2
06128	Cadmium	7440-43-9	0.191		0.0408	0.113		2
06131	Chromium	7440-47-3	24.0		0.136	0.453		2
06132	Cobalt	7440-48-4	5.32		0.0227	0.113		2
06133	Copper	7440-50-8	12.0		0.0748	0.453		2
06135	Lead	7439-92-1	7.28		0.0118	0.227		2
06138	Molybdenum	7439-98-7	0.526		0.0566	0.113		2
06139	Nickel	7440-02-0	15.8		0.113	0.453		2
06141	Selenium	7782-49-2	0.163	J	0.0453	0.453		2
06142	Silver	7440-22-4	0.0394	J	0.0136	0.113		2
06145	Thallium	7440-28-0	0.307		0.0340	0.113		2
06148	Vanadium	7440-62-2	52.1		0.0249	0.113		2
06149	Zinc	7440-66-6	59.7		0.634	3.40		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0031	U	0.0031	0.110		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	0.92	U	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	17.9		0.92	1.7		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14545 SDG#: DE051-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 314.0**		ug/kg		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.3		1
	SW-846 7199		mg/kg		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.41	J	0.23	1.1		1
	SW-846 9012B		mg/kg		mg/kg	mg/kg	mg/kg	
05895	21a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.57		1
	ASTM D1498		mV		mV	mV	mV	
01821	Oxidation Reduction Potential	n.a.	618		10.0	10.0		1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.							
	SW-846 9045C modified		Std. Units		Std. Units	Std. Units	Std. Units	
00394	22a pH by 9045C	n.a.	5.91		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	%	
11624	28a Moisture Content by 160.3	n.a.	12.6		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-145-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B103621AA	12/28/2010	18:16	Chelsea B Eastep	0.82
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103631AA	12/29/2010	11:51	Jason M Long	19.5
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010	17:48	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201035723411	12/23/2010	17:56	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201035723411	12/23/2010	17:56	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201035723411	12/23/2010	17:45	Lois E Hiltz	n.a.
11622	19a NDMA by 1625C	EPA 1625C	1	10363SLG026	01/06/2011	17:50	Timothy J Trees	5

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14545 SDG#: DE051-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	10363SLK026	01/20/2011 12:06	Joseph M Gambler	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	10365SLA026	01/14/2011 08:13	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	10363SLG026	12/30/2010 10:40	Kelli M Barto	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	10365SLA026	01/03/2011 18:20	Sally L Appleyard	1
00381	BNA Soil Sonication	SW-846 3550B	1	10363SLK026	12/30/2010 06:00	Joseph S Feister	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	10357A34B	12/27/2010 21:04	Carrie E Miller	25.93
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201035723411	12/23/2010 17:44	Lois E Hiltz	n.a.
10132	20a Energetics by 8330A	SW-846 8330A	1	103650008A	01/06/2011 07:21	James H Place	1
04173	17a Formaldehyde by 8315A	SW-846 8315A	1	103610005A	12/29/2010 19:36	Michele D Hamilton	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	103640029A	01/12/2011 10:12	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	103640029A	12/31/2010 06:30	Joseph S Feister	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	103610005A	12/27/2010 15:00	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	103650008A	01/03/2011 16:00	Wanda F Oswald	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	103620026A	12/31/2010 21:01	Heather E Williams	1
10501	25a Alcohols by 8015B	SW-846 8015B	1	103640014A	12/30/2010 17:56	Dustin A Underkoffler	1
08283	27a Glycols by 8015B	SW-846 8015B modified	1	103630032A	12/29/2010 21:29	Robert Brown	1
10318	26a Terphenyls by 8015B	SW-846 8015B	1	103640012A	01/05/2011 11:04	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	103620026A	12/29/2010 08:00	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	103640012A	12/31/2010 00:30	David V Hershey Jr	1
11551	Direct Inj. Solids Glycol Ext.	SW-846 8015B	1	103630032A	12/29/2010 17:00	Tyler O Griffin	1
00380	Direct Injection Solids Ext	SW-846 8015B	1	103640014A	12/30/2010 13:30	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
07914	Boron	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
01650	Calcium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
01654	Iron	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
01656	Lithium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
01657	Magnesium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
06958	Manganese	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
10145	Phosphorus	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
01662	Potassium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
01667	Sodium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
07968	Strontium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
06969	Tin	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
06970	Titanium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
10146	Zirconium	SW-846 6010B	1	103645708002	12/31/2010 10:57	Eric L Eby	1
06124	Antimony	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173177
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

14545 SDG#: DE051-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06126	Barium	SW-846 6020	1	103641026002D	01/06/2011 14:29	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06132	Cobalt	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06133	Copper	SW-846 6020	1	110101026002A	01/12/2011 09:51	Choon Y Tian	2
06135	Lead	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	103641026002C	01/06/2011 14:29	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	103641026002B	01/06/2011 14:29	Choon Y Tian	2
06142	Silver	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	110101026002A	01/12/2011 09:51	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	103641026002A	01/06/2011 14:29	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	103645711003	01/02/2011 13:41	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	103645708002	12/30/2010 09:09	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	103641026002	12/30/2010 09:55	James L Mertz	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	2	110101026002	01/11/2011 12:23	James L Mertz	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	103645711003	12/30/2010 11:09	James L Mertz	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11013013201B	01/14/2011 15:58	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11013013201B	01/14/2011 15:58	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11013013203B	01/15/2011 02:42	Ashley M Adams	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11017243201A	01/20/2011 22:47	Ashley M Adams	1
05895	21a Cyanide by 9012B	SW-846 9012B	1	11004102201A	01/04/2011 19:09	Joseph E McKenzie	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11013013201B	01/13/2011 13:30	Nancy J Shoop	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11013013203B	01/13/2011 23:45	Venia B McFadden	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11004102201A	01/04/2011 09:15	Nancy J Shoop	1
01821	Oxidation Reduction Potential	ASTM D1498	1	10361182103B	12/27/2010 12:30	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	10361039403B	12/27/2010 12:30	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11017243201A	01/17/2011 20:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: TB-122210 Water
SSFL Area IV Collocated Soil Sampling
TB-122210

LLI Sample # WW 6173178
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:00

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

TB222 SDG#: DE051-16TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	6	U	6	20		1
10904	Benzene	71-43-2	0.5	U	0.5	5		1
10904	Bromobenzene	108-86-1	1	U	1	5		1
10904	Bromochloromethane	74-97-5	1	U	1	5		1
10904	Bromodichloromethane	75-27-4	1	U	1	5		1
10904	Bromoform	75-25-2	1	U	1	5		1
10904	Bromomethane	74-83-9	1	U	1	5		1
10904	2-Butanone	78-93-3	3	U	3	10		1
10904	n-Butylbenzene	104-51-8	1	U	1	5		1
10904	sec-Butylbenzene	135-98-8	1	U	1	5		1
10904	tert-Butylbenzene	98-06-6	1	U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1	U	1	5		1
10904	Chlorobenzene	108-90-7	0.8	U	0.8	5		1
10904	Chloroethane	75-00-3	1	U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2	U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.							
10904	Chloroform	67-66-3	0.8	U	0.8	5		1
10904	Chloromethane	74-87-3	1	U	1	5		1
10904	2-Chlorotoluene	95-49-8	1	U	1	5		1
10904	4-Chlorotoluene	106-43-4	1	U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2	U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2	U	2	5		1
10904	Dibromochloromethane	124-48-1	1	U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1	U	1	5		1
10904	Dibromomethane	74-95-3	1	U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2	U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1	U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1	U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8	U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8	U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8	U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1	U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1	U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1	U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1	U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1	U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1	U	1	5		1
10904	Ethylbenzene	100-41-4	0.8	U	0.8	5		1
10904	Freon 113	76-13-1	2	U	2	10		1
10904	Freon 133a	75-88-7	2	U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2	U	2	5		1
10904	2-Hexanone	591-78-6	3	U	3	10		1
10904	Isopropylbenzene	98-82-8	1	U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1	U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5	U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3	U	3	10		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: TB-122210 Water
SSFL Area IV Collocated Soil Sampling
TB-122210

LLI Sample # WW 6173178
LLI Group # 1226926
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:00

Submitted: 12/23/2010 11:20
Reported: 02/01/2011 10:05

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

TB222 SDG#: DE051-16TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	ug/l	
10904	Methylene Chloride	75-09-2	2	U	2	5		1
10904	n-Propylbenzene	103-65-1	1	U	1	5		1
10904	Styrene	100-42-5	1	U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8	U	0.8	5		1
10904	Toluene	108-88-3	0.7	U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1	U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8	U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8	U	0.8	5		1
10904	Trichloroethene	79-01-6	1	U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2	U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1	U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5		1
10904	Vinyl Chloride	75-01-4	1	U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8	U	0.8	5		1
10904	o-Xylene	95-47-6	0.8	U	0.8	5		1
GC/MS Volatiles	**SW-846 8260B SIM**		ug/l		ug/l	ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5	U	0.5	2.0		1
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20	U	20	50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	Y103631AA	12/29/2010 05:01	Frank A Valla, Jr	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E103562AB	12/28/2010 12:47	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E103562AB	12/28/2010 12:47	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	Y103631AA	12/29/2010 05:01	Frank A Valla, Jr	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	10363B20A	12/29/2010 20:57	Marie D John	1
01146	GC VOA Water Prep	SW-846 5030B	1	10363B20A	12/29/2010 20:57	Marie D John	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B103621AA	Sample number(s): 6173165-6173166,6173171,6173174-6173175,6173177									
Acetone	6.7	U	6.7	8.0	ug/kg	156	156	32-209	0	30
Benzene	0.10	U	0.10	4.0	ug/kg	102	100	80-120	2	30
Bromobenzene	0.13	U	0.13	4.0	ug/kg	89	89	79-120	1	30
Bromochloromethane	0.33	U	0.33	4.0	ug/kg	101	100	79-124	2	30
Bromodichloromethane	0.08	U	0.08	4.0	ug/kg	95	94	78-120	1	30
Bromoform	0.40	U	0.40	4.0	ug/kg	92	90	70-120	3	30
Bromomethane	0.25	U	0.25	4.0	ug/kg	71	72	32-162	1	30
2-Butanone	1.2	U	1.2	8.0	ug/kg	126	122	46-153	3	30
n-Butylbenzene	0.12	U	0.12	4.0	ug/kg	91	90	72-120	0	30
sec-Butylbenzene	0.06	U	0.06	4.0	ug/kg	91	90	75-120	2	30
tert-Butylbenzene	0.16	U	0.16	4.0	ug/kg	90	87	75-120	3	30
Carbon Tetrachloride	0.14	U	0.14	4.0	ug/kg	100	95	69-122	5	30
Chlorobenzene	0.11	U	0.11	4.0	ug/kg	94	94	80-120	0	30
Chloroethane	0.13	U	0.13	4.0	ug/kg	77	76	37-154	1	30
2-Chloroethyl Vinyl Ether	0.30	U	0.30	4.0	ug/kg	103	99	43-146	4	30
Chloroform	0.12	U	0.12	4.0	ug/kg	100	98	80-120	3	30
Chloromethane	0.33	U	0.33	4.0	ug/kg	86	83	54-132	3	30
2-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	90	90	78-120	1	30
4-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	91	92	79-120	1	30
Chlorotrifluoroethene	0.50	U	0.50	5.0	ug/kg	122	111	22-131	10	30
1,2-Dibromo-3-chloropropane	0.70	U	0.70	4.0	ug/kg	89	84	58-120	6	30
Dibromochloromethane	0.20	U	0.20	4.0	ug/kg	94	92	77-120	2	30
1,2-Dibromoethane	0.17	U	0.17	4.0	ug/kg	97	93	80-120	4	30
Dibromomethane	0.24	U	0.24	4.0	ug/kg	101	98	80-120	3	30
1,2-Dichlorobenzene	0.09	U	0.09	4.0	ug/kg	91	92	79-120	1	30
1,3-Dichlorobenzene	0.12	U	0.12	4.0	ug/kg	88	88	78-120	1	30
1,4-Dichlorobenzene	0.16	U	0.16	4.0	ug/kg	89	91	79-120	2	30
Dichlorodifluoromethane	0.12	U	0.12	4.0	ug/kg	71	66	20-120	7	30
1,1-Dichloroethane	0.10	U	0.10	4.0	ug/kg	100	98	80-120	2	30
1,2-Dichloroethane	0.15	U	0.15	4.0	ug/kg	100	98	71-129	2	30
1,1-Dichloroethene	0.39	U	0.39	4.0	ug/kg	97	93	73-123	5	30
cis-1,2-Dichloroethene	0.19	U	0.19	4.0	ug/kg	101	99	80-120	2	30
trans-1,2-Dichloroethene	0.12	U	0.12	4.0	ug/kg	101	97	79-120	3	30
1,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	99	99	80-120	0	30
1,3-Dichloropropane	0.08	U	0.08	4.0	ug/kg	96	93	80-120	3	30
2,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	98	95	72-123	3	30
1,1-Dichloropropene	0.13	U	0.13	4.0	ug/kg	99	95	77-120	4	30
cis-1,3-Dichloropropene	0.16	U	0.16	4.0	ug/kg	92	90	80-120	2	30
trans-1,3-Dichloropropene	0.17	U	0.17	4.0	ug/kg	89	86	77-120	3	30
Ethylbenzene	0.06	U	0.06	4.0	ug/kg	95	92	80-120	2	30
Freon 113	0.11	U	0.11	4.0	ug/kg	97	90	61-126	7	30
Freon 133a	0.50	U	0.50	5.0	ug/kg	94	90	78-120	5	30
Hexachlorobutadiene	0.14	U	0.14	4.0	ug/kg	87	85	57-120	2	30
2-Hexanone	1.6	U	1.6	8.0	ug/kg	81	79	45-155	2	30
Isopropylbenzene	0.06	U	0.06	4.0	ug/kg	94	91	76-120	3	30
p-Isopropyltoluene	0.11	U	0.11	4.0	ug/kg	91	90	75-120	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21	U	0.21	4.0	ug/kg	98	94	74-121	4	30
4-Methyl-2-pentanone	0.39	U	0.39	8.0	ug/kg	78	73	61-134	7	30
Methylene Chloride	0.39	J	0.24	4.0	ug/kg	96	94	76-124	2	30
n-Propylbenzene	0.07	U	0.07	4.0	ug/kg	95	93	77-120	2	30
Styrene	0.10	U	0.10	4.0	ug/kg	92	93	76-120	0	30
1,1,1,2-Tetrachloroethane	0.11	U	0.11	4.0	ug/kg	95	93	80-120	2	30
1,1,2,2-Tetrachloroethane	0.23	U	0.23	4.0	ug/kg	93	89	71-123	5	30
Tetrachloroethene	0.20	U	0.20	4.0	ug/kg	94	93	77-120	1	30
Toluene	0.17	J	0.08	4.0	ug/kg	97	94	80-120	2	30
1,2,3-Trichlorobenzene	0.14	U	0.14	4.0	ug/kg	84	88	64-120	4	30
1,2,4-Trichlorobenzene	0.18	U	0.18	4.0	ug/kg	81	86	68-120	6	30
1,1,1-Trichloroethane	0.20	U	0.20	4.0	ug/kg	100	97	71-125	3	30
1,1,2-Trichloroethane	0.27	U	0.27	4.0	ug/kg	96	93	80-120	3	30
Trichloroethene	0.15	U	0.15	4.0	ug/kg	97	96	80-120	1	30
Trichlorofluoromethane	0.29	U	0.29	4.0	ug/kg	83	79	58-133	5	30
1,2,3-Trichloropropane	0.33	U	0.33	4.0	ug/kg	93	89	71-123	4	30
1,2,4-Trimethylbenzene	0.40	U	0.40	4.0	ug/kg	91	91	79-120	0	30
1,3,5-Trimethylbenzene	0.10	U	0.10	4.0	ug/kg	91	92	78-120	1	30
Vinyl Chloride	0.20	U	0.20	4.0	ug/kg	83	80	53-120	4	30
m+p-Xylene	0.17	U	0.17	4.0	ug/kg	96	95	80-120	1	30
o-Xylene	0.18	J	0.17	4.0	ug/kg	90	90	80-120	0	30
Batch number: E103562AB	Sample number(s): 6173162,6173178									
1,4-Dioxane	0.5	U	0.5	2.0	ug/l	105	109	60-132	4	30
Batch number: E103631AA	Sample number(s): 6173165-6173166,6173171,6173174-6173175,6173177									
1,4-Dioxane	5.0	U	5.0	15	ug/kg	106	101	70-130	4	30
Batch number: Y103631AA	Sample number(s): 6173162,6173178									
Acetone	6	U	6.	20	ug/l	70	66	49-234	6	30
Benzene	0.5	U	0.5	5	ug/l	100	99	79-120	1	30
Bromobenzene	1	U	1.	5	ug/l	102	104	80-120	1	30
Bromochloromethane	1	U	1.	5	ug/l	97	97	80-120	1	30
Bromodichloromethane	1	U	1.	5	ug/l	92	92	80-120	0	30
Bromoform	1	U	1.	5	ug/l	90	91	61-120	1	30
Bromomethane	1	U	1.	5	ug/l	93	92	44-120	1	30
2-Butanone	3	U	3.	10	ug/l	91	88	66-151	3	30
n-Butylbenzene	1	U	1.	5	ug/l	100	98	74-120	2	30
sec-Butylbenzene	1	U	1.	5	ug/l	105	104	78-120	1	30
tert-Butylbenzene	1	U	1.	5	ug/l	99	96	80-120	3	30
Carbon Tetrachloride	1	U	1.	5	ug/l	94	93	75-123	1	30
Chlorobenzene	0.8	U	0.8	5	ug/l	95	96	80-120	0	30
Chloroethane	1	U	1.	5	ug/l	94	92	49-129	2	30
2-Chloroethyl Vinyl Ether	2	U	2.	10	ug/l	96	95	56-129	0	30
Chloroform	0.8	U	0.8	5	ug/l	98	99	77-122	1	30
Chloromethane	1	U	1.	5	ug/l	91	92	60-129	0	30
2-Chlorotoluene	1	U	1.	5	ug/l	102	101	80-120	1	30
4-Chlorotoluene	1	U	1.	5	ug/l	101	98	80-120	3	30
Chlorotrifluoroethene	2	U	2.	5	ug/l	101	98	38-136	3	30
1,2-Dibromo-3-chloropropane	2	U	2.	5	ug/l	90	93	66-120	2	30
Dibromochloromethane	1	U	1.	5	ug/l	90	90	80-120	0	30
1,2-Dibromoethane	1	U	1.	5	ug/l	97	97	80-120	0	30
Dibromomethane	1	U	1.	5	ug/l	98	95	80-120	2	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	95	94	80-120	1	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	101	100	80-120	1	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	98	97	80-120	0	30
Dichlorodifluoromethane	2	U	2.	5	ug/l	89	87	47-120	3	30
1,1-Dichloroethane	1	U	1.	5	ug/l	99	99	79-120	0	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloroethane	1	U	1.	5	ug/l	97	96	70-130	1	30
1,1-Dichloroethene	0.8	U	0.8	5	ug/l	107	108	74-123	1	30
cis-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	101	101	80-120	0	30
trans-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	102	102	80-120	1	30
1,2-Dichloropropane	1	U	1.	5	ug/l	96	94	78-120	2	30
1,3-Dichloropropane	1	U	1.	5	ug/l	97	97	80-120	1	30
2,2-Dichloropropane	1	U	1.	5	ug/l	95	95	77-124	0	30
1,1-Dichloropropene	1	U	1.	5	ug/l	99	99	80-120	0	30
cis-1,3-Dichloropropene	1	U	1.	5	ug/l	91	89	80-120	2	30
trans-1,3-Dichloropropene	1	U	1.	5	ug/l	91	91	79-120	1	30
Ethylbenzene	0.8	U	0.8	5	ug/l	98	97	79-120	0	30
Freon 113	2	U	2.	10	ug/l	111	109	69-128	2	30
Freon 133a	2	U	2.	5	ug/l	97	93	77-120	3	30
Hexachlorobutadiene	2	U	2.	5	ug/l	90	92	58-120	2	30
2-Hexanone	3	U	3.	10	ug/l	95	96	65-136	0	30
Isopropylbenzene	1	U	1.	5	ug/l	98	97	77-120	1	30
p-Isopropyltoluene	1	U	1.	5	ug/l	104	102	80-120	2	30
Methyl Tertiary Butyl Ether	0.5	U	0.5	5	ug/l	98	99	76-120	1	30
4-Methyl-2-pentanone	3	U	3.	10	ug/l	95	93	70-121	3	30
Methylene Chloride	2	U	2.	5	ug/l	104	106	80-120	2	30
n-Propylbenzene	1	U	1.	5	ug/l	106	106	80-120	0	30
Styrene	1	U	1.	5	ug/l	101	100	80-120	1	30
1,1,1,2-Tetrachloroethane	1	U	1.	5	ug/l	94	93	80-120	1	30
1,1,2,2-Tetrachloroethane	1	U	1.	5	ug/l	98	99	71-120	0	30
Tetrachloroethene	0.8	U	0.8	5	ug/l	98	98	80-121	0	30
Toluene	0.7	U	0.7	5	ug/l	97	98	79-120	1	30
1,2,3-Trichlorobenzene	1	U	1.	5	ug/l	99	100	65-120	1	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	99	99	67-120	0	30
1,1,1-Trichloroethane	0.8	U	0.8	5	ug/l	97	97	75-127	0	30
1,1,2-Trichloroethane	0.8	U	0.8	5	ug/l	97	98	80-120	1	30
Trichloroethene	1	U	1.	5	ug/l	98	98	80-120	0	30
Trichlorofluoromethane	2	U	2.	5	ug/l	97	95	64-129	2	30
1,2,3-Trichloropropane	1	U	1.	5	ug/l	103	104	80-120	1	30
1,2,4-Trimethylbenzene	1	U	1.	5	ug/l	104	103	74-120	1	30
1,3,5-Trimethylbenzene	1	U	1.	5	ug/l	104	101	75-120	2	30
Vinyl Chloride	1	U	1.	5	ug/l	89	88	65-125	1	30
m+p-Xylene	0.8	U	0.8	5	ug/l	94	94	80-120	0	30
o-Xylene	0.8	U	0.8	5	ug/l	94	94	80-120	1	30
Batch number: 10362WAA026	Sample number(s): 6173162									
N-Nitrosodimethylamine	1.95		0.500	1.00	ng/l	92	89	70-130	4	30
Batch number: 10362WAC026	Sample number(s): 6173161-6173162									
Acenaphthene	0.010	U	0.010	0.050	ug/l	85	81	74-109	4	30
Acenaphthylene	0.010	U	0.010	0.050	ug/l	89	86	70-110	4	30
Anthracene	0.010	U	0.010	0.050	ug/l	88	87	66-111	1	30
Benzo(a)anthracene	0.010	U	0.010	0.050	ug/l	89	89	72-114	1	30
Benzo(a)pyrene	0.010	U	0.010	0.050	ug/l	84	84	64-115	1	30
Benzo(b)fluoranthene	0.010	U	0.010	0.050	ug/l	91	92	69-123	2	30
Benzo(g,h,i)perylene	0.010	U	0.010	0.050	ug/l	83	83	68-125	0	30
Benzo(k)fluoranthene	0.010	U	0.010	0.050	ug/l	82	82	72-122	0	30
Butylbenzylphthalate	0.056	J	0.050	1.0	ug/l	77	78	70-130	2	30
Di-n-butylphthalate	0.050	U	0.050	1.0	ug/l	91	90	70-130	1	30
Chrysene	0.010	U	0.010	0.050	ug/l	85	85	76-116	0	30
Dibenz(a,h)anthracene	0.010	U	0.010	0.050	ug/l	82	83	71-125	1	30
Diethylphthalate	0.050	U	0.050	1.0	ug/l	73	73	70-130	1	30
Dimethylphthalate	0.050	U	0.050	1.0	ug/l	66*	69*	70-130	5	30
Bis(2-Ethylhexyl)phthalate	0.056	J	0.050	1.0	ug/l	129	92	70-130	33*	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	0.010	U	0.010	0.050	ug/l	88	89	75-116	1	30
Fluorene	0.010	U	0.010	0.050	ug/l	92	89	75-114	3	30
Indeno(1,2,3-cd)pyrene	0.010	U	0.010	0.050	ug/l	83	83	69-124	0	30
1-Methylnaphthalene	0.010	U	0.010	0.050	ug/l	87	82	71-117	5	30
2-Methylnaphthalene	0.010	U	0.010	0.050	ug/l	78	75	75-115	4	30
Naphthalene	0.010	U	0.010	0.050	ug/l	83	80	72-109	3	30
N-Nitrosodimethylamine	0.010	U	0.010	0.050	ug/l	55*	51*	70-130	6	30
Di-n-octylphthalate	0.082	J	0.050	1.0	ug/l	83	77	70-130	8	30
Phenanthrene	0.010	U	0.010	0.050	ug/l	85	85	76-111	1	30
Pyrene	0.010	U	0.010	0.050	ug/l	88	89	69-118	1	30
Batch number: 10362WAE026	Sample number(s): 6173161-6173162									
Aniline	1	U	1.	5	ug/l	73	68	49-101	7	30
Benzidine	20	U	20.	60	ug/l	55	56	20-109	2	30
Benzoic acid	6	U	6.	15	ug/l	51	47	10-69	10	30
Benzyl alcohol	5	U	5.	15	ug/l	85	83	66-97	2	30
4-Bromophenyl-phenylether	1	U	1.	5	ug/l	95	94	82-117	1	30
Carbazole	1	U	1.	5	ug/l	102	101	81-114	2	30
4-Chloro-3-methylphenol	1	U	1.	5	ug/l	98	99	70-123	1	30
4-Chloroaniline	1	U	1.	5	ug/l	53	43	42-124	21	30
bis(2-Chloroethoxy)methane	1	U	1.	5	ug/l	96	95	74-124	1	30
bis(2-Chloroethyl)ether	1	U	1.	5	ug/l	96	97	77-108	1	30
bis(2-Chloroisopropyl)ether	1	U	1.	5	ug/l	93	93	62-127	1	30
2-Chloronaphthalene	2	U	2.	5	ug/l	83	82	54-132	1	30
2-Chlorophenol	1	U	1.	5	ug/l	99	97	77-108	1	30
4-Chlorophenyl-phenylether	2	U	2.	5	ug/l	96	99	82-111	2	30
Dibenzofuran	1	U	1.	5	ug/l	100	100	83-108	1	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	79	81	67-108	3	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	75	78	63-110	4	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	77	79	65-113	3	30
3,3'-Dichlorobenzidine	2	U	2.	5	ug/l	68	62	49-111	8	30
2,4-Dichlorophenol	1	U	1.	5	ug/l	104	99	80-109	5	30
2,4-Dimethylphenol	3	U	3.	10	ug/l	101	98	72-110	3	30
3,5-Dimethylphenol	3	U	3.	10	ug/l	109	107	70-130	1	30
4,6-Dinitro-2-methylphenol	5	U	5.	15	ug/l	84	86	78-119	2	30
2,4-Dinitrophenol	10	U	10.	30	ug/l	82	84	64-120	3	30
2,4-Dinitrotoluene	1	U	1.	5	ug/l	102	101	81-115	1	30
2,6-Dinitrotoluene	1	U	1.	5	ug/l	98	100	85-115	2	30
1,2-Diphenylhydrazine	1	U	1.	5	ug/l	101	99	78-116	2	30
Hexachlorobenzene	1	U	1.	5	ug/l	99	99	81-118	1	30
Hexachlorobutadiene	1	U	1.	5	ug/l	77	80	57-124	3	30
Hexachlorocyclopentadiene	5	U	5.	15	ug/l	65	64	10-118	1	30
Hexachloroethane	1	U	1.	5	ug/l	70	71	52-113	0	30
Isophorone	1	U	1.	5	ug/l	99	96	74-117	3	30
2-Methylphenol	1	U	1.	5	ug/l	99	98	64-101	1	30
4-Methylphenol	2	U	2.	5	ug/l	86	86	61-103	1	30
2-Nitroaniline	1	U	1.	5	ug/l	102	100	83-116	2	30
3-Nitroaniline	1	U	1.	5	ug/l	98	95	74-113	2	30
4-Nitroaniline	1	U	1.	5	ug/l	84	84	59-100	0	30
Nitrobenzene	1	U	1.	5	ug/l	99	97	75-109	2	30
2-Nitrophenol	1	U	1.	5	ug/l	100	98	86-120	2	30
4-Nitrophenol	10	U	10.	30	ug/l	45	43	16-78	5	30
N-Nitroso-di-n-propylamine	1	U	1.	5	ug/l	98	98	69-110	0	30
N-Nitrosodiphenylamine	2	U	2.	5	ug/l	98	98	67-136	0	30
Pentachlorophenol	3	U	3.	15	ug/l	83	83	53-110	0	30
Phenol	1	U	1.	5	ug/l	52	50	29-67	4	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	87	88	71-112	1	30
2,4,5-Trichlorophenol	1	U	1.	5	ug/l	102	99	79-107	3	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,4,6-Trichlorophenol	1	U	1.	5	ug/l	103	102	81-113	0	30
Batch number: 10363SLG026	Sample number(s): 6173165-6173166,6173171,6173177									
N-Nitrosodimethylamine	16.7	U	16.7	33.3	ng/kg	93		70-130		
Batch number: 10363SLK026	Sample number(s): 6173160,6173163-6173169,6173171-6173177									
Acenaphthene	17	U	17.	170	ug/kg	98		76-111		
Acenaphthylene	17	U	17.	170	ug/kg	101		75-122		
Aniline	170 U		170.	500	ug/kg	47		10-107		
Anthracene	17	U	17.	170	ug/kg	100		76-112		
Benzidine	1,200 U		1,200.	3,300	ug/kg	44		15-121		
Benzo(a)anthracene	17	U	17.	170	ug/kg	98		73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	89		69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	88		61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	85		65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	88		67-125		
Benzoic acid	170 U		170.	500	ug/kg	96		10-154		
Benzyl alcohol	170 U		170.	500	ug/kg	90		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	94		79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	98		75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	101		79-112		
Carbazole	17	U	17.	170	ug/kg	102		77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	101		74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	60		10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	98		70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	87		70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	86		68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	84		67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	97		72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	100		79-110		
Chrysene	17	U	17.	170	ug/kg	95		76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	87		70-128		
Dibenzofuran	17	U	17.	170	ug/kg	99		79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	89		79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	86		70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	86		74-106		
3,3'-Dichlorobenzidine	100 U		100.	330	ug/kg	41		38-105		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	102		75-111		
Diethylphthalate	17	U	17.	170	ug/kg	101		76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	100		72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	107		70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	98		77-109		
4,6-Dinitro-2-methylphenol	170 U		170.	500	ug/kg	89		53-110		
2,4-Dinitrophenol	670 U		670.	2,000	ug/kg	87		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	106		73-115		
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	105		79-115		
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	102		77-111		
bis(2-Ethylhexyl)phthalate	17	U	17.	330	ug/kg	99		75-117		
Fluoranthene	17	U	17.	170	ug/kg	107		78-116		
Fluorene	17	U	17.	170	ug/kg	98		75-116		
Hexachlorobenzene	17	U	17.	170	ug/kg	97		78-116		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Hexachlorobutadiene	67	U	67.	170	ug/kg	101		70-112		
Hexachlorocyclopentadiene	170	U	170.	500	ug/kg	104		46-115		
Hexachloroethane	17	U	17.	170	ug/kg	90		68-105		
Indeno(1,2,3-cd)pyrene	17	U	17.	170	ug/kg	87		64-119		
Isophorone	17	U	17.	170	ug/kg	94		69-110		
1-Methylnaphthalene	17	U	17.	170	ug/kg	98		74-105		
2-Methylnaphthalene	17	U	17.	170	ug/kg	91		76-105		
2-Methylphenol	33	U	33.	170	ug/kg	95		66-110		
4-Methylphenol	33	U	33.	170	ug/kg	94		66-117		
Naphthalene	17	U	17.	170	ug/kg	92		73-106		
2-Nitroaniline	17	U	17.	170	ug/kg	107		78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	94		62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	71		49-98		
Nitrobenzene	17	U	17.	170	ug/kg	101		71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	98		81-114		
4-Nitrophenol	170	U	170.	500	ug/kg	109		56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	90		63-107		
N-Nitrosodimethylamine	33	U	33.	170	ug/kg	77		60-106		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	97		67-141		
Di-n-octylphthalate	17	U	17.	170	ug/kg	91		68-130		
Pentachlorophenol	170	U	170.	500	ug/kg	84		35-106		
Phenanthrene	17	U	17.	170	ug/kg	99		77-113		
Phenol	17	U	17.	170	ug/kg	95		58-112		
Pyrene	17	U	17.	170	ug/kg	96		75-115		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	99		73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	103		76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	106		78-111		

Batch number: 10365SLA026 Sample number(s): 6173160,6173163-6173169,6173171-6173177

Acenaphthene	0.67	U	0.67	1.7	ug/kg	89		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	91		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	88		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	95		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	89		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	102		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	95		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	92		66-137		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	108		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	114		84-132		
Chrysene	0.33	U	0.33	1.7	ug/kg	91		79-120		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	92		62-142		
Diethylphthalate	6.0	U	6.0	18	ug/kg	111		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	104		70-130		
Bis(2-Ethylhexyl)phthalate	6.0	U	6.0	18	ug/kg	137		67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	84		78-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	94		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	90		62-141		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	92		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	88		62-120		
Naphthalene	0.67	U	0.67	1.7	ug/kg	87		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	95		39-148		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	103		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	90		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	88		56-121		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10357A34B	Sample number(s): 6173165-6173166,6173171,6173177									
9a TPH by EPA 8015B Gas C5-C12	0.2	U	0.2	1.0	mg/kg	68	75	67-119	9	30
Batch number: 10363B20A	Sample number(s): 6173162,6173178									
TPH-GRO S.CA water C5-C12	20	U	20.	50	ug/l	100	109	75-135	9	30
Batch number: 103610006A	Sample number(s): 6173162									
4-Amino-2,6-Dinitrotoluene	0.30	U	0.30	0.60	ug/l	95	91	80-120	4	30
2-Amino-4,6-Dinitrotoluene	0.20	U	0.20	0.60	ug/l	92	89	80-120	3	30
2,6-Diamino-4-nitrotoluene	0.20	U	0.20	0.60	ug/l	80	83	75-125	4	30
2,4-Diamino-6-nitrotoluene	0.20	U	0.20	0.60	ug/l	80	83	75-125	4	30
1,3-Dinitrobenzene	0.20	U	0.20	0.60	ug/l	91	89	72-117	2	30
2,4-Dinitrotoluene	0.20	U	0.20	0.60	ug/l	90	88	80-120	2	30
2,6-Dinitrotoluene	0.20	U	0.20	0.60	ug/l	100	97	80-120	3	30
HMX	0.65	U	0.65	2.0	ug/l	83	83	65-125	0	30
Nitrobenzene	0.20	U	0.20	0.60	ug/l	85	83	75-121	2	30
Nitroglycerin	5.2	U	5.2	15	ug/l	83	83	80-120	0	30
2-Nitrotoluene	0.20	U	0.20	0.60	ug/l	93	90	74-120	3	30
3-Nitrotoluene	0.40	U	0.40	1.2	ug/l	92	90	69-107	2	30
4-Nitrotoluene	0.60	U	0.60	1.2	ug/l	93	91	80-120	2	30
PETN	6.0	U	6.0	18	ug/l	100	96	80-120	4	30
RDX	0.20	U	0.20	0.60	ug/l	81	82	70-125	1	30
Tetryl	0.40	U	0.40	0.60	ug/l	110	100	33-147	10	30
1,3,5-Trinitrobenzene	0.20	U	0.20	0.60	ug/l	91	90	53-129	1	30
2,4,6-Trinitrotoluene	0.20	U	0.20	0.60	ug/l	94	92	76-109	2	30
Batch number: 103650008A	Sample number(s): 6173165-6173166,6173171,6173177									
4-Amino-2,6-Dinitrotoluene	75	U	75.	150	ug/kg	116		80-120		
2-Amino-4,6-Dinitrotoluene	50	U	50.	150	ug/kg	117		80-120		
2,6-Diamino-4-nitrotoluene	100 U		100.	300	ug/kg	100	96	54-134	4	30
2,4-Diamino-6-nitrotoluene	100 U		100.	300	ug/kg	99	95	54-134	4	30
1,3-Dinitrobenzene	50	U	50.	150	ug/kg	113		51-171		
2,4-Dinitrotoluene	50	U	50.	150	ug/kg	112		72-135		
2,6-Dinitrotoluene	50	U	50.	150	ug/kg	116		80-120		
HMX	130 U		130.	380	ug/kg	106		74-130		
Nitrobenzene	50	U	50.	150	ug/kg	112		80-120		
Nitroglycerin	1,000 U		1,000.	3,000	ug/kg	100		80-120		
2-Nitrotoluene	100 U		100.	150	ug/kg	117		78-128		
3-Nitrotoluene	130 U		130.	150	ug/kg	117		73-127		
4-Nitrotoluene	100 U		100.	150	ug/kg	116		80-120		
PETN	1,000 U		1,000.	3,000	ug/kg	115		80-120		
RDX	63	U	63.	150	ug/kg	111		75-131		
Tetryl	77	U	77.	150	ug/kg	136		70-168		
1,3,5-Trinitrobenzene	50	U	50.	150	ug/kg	127		77-137		
2,4,6-Trinitrotoluene	50	U	50.	150	ug/kg	118		80-120		
Batch number: 103560024A	Sample number(s): 6173162									
17b Formaldehyde by 8315A	10	U	10.	50	ug/l	88	96	69-130	9	30
Batch number: 103610005A	Sample number(s): 6173165-6173166,6173171,6173177									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
17a Formaldehyde by 8315A	600 U		600.	1,500	ug/kg	99		80-126		
Batch number: 103620008A	Sample number(s): 6173161-6173162									
2,4-D	0.16	U	0.16	0.50	ug/l	120	120	45-128	0	30
Dalapon	0.25	U	0.25	1.3	ug/l	97	98	40-100	2	30
2,4-DB	0.30	U	0.30	1.0	ug/l	112	108	41-138	4	30
Dicamba	0.080	U	0.080	0.30	ug/l	108	104	51-144	4	30
Dinoseb	0.10	U	0.10	0.50	ug/l	60	49	23-93	21	30
2,4-DP (Dichlorprop)	0.16	U	0.16	0.50	ug/l	160*	156*	72-145	3	30
MCPA	300 U		300.	1,000	ug/l	100	98	69-129	2	30
MCPP	50	U	50.	200	ug/l	104	100	66-132	4	30
2,4,5-T	0.015	U	0.015	0.050	ug/l	76	84	53-141	10	30
2,4,5-TP	0.010	U	0.010	0.050	ug/l	108	108	56-135	0	30
Batch number: 110040014A	Sample number(s): 6173160,6173163-6173169,6173171-6173173									
2,4-D	1.2	U	1.2	3.6	ug/kg	78		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	56		24-89		
2,4-DB	1.1	J	0.62	1.7	ug/kg	57		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	69		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	5*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	63		60-141		
MCPA	76	U	76.	250	ug/kg	54		34-113		
MCPP (Mecoprop)	75	U	75.	250	ug/kg	48		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	72		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	53		48-138		
Batch number: 110040016A	Sample number(s): 6173164,6173175									
6a Perchlorate EPA 6850	2.1	U	2.1	5.0	ug/kg	105		85-115		
Batch number: 103570023A	Sample number(s): 6173161-6173162									
Aldrin	0.0020	U	0.0020	0.010	ug/l	111	111	54-159	0	30
Alpha BHC	0.0030	U	0.0030	0.010	ug/l	133	133	59-146	0	30
Beta BHC	0.0029	U	0.0029	0.010	ug/l	124	134	73-147	8	30
Gamma BHC - Lindane	0.0020	U	0.0020	0.010	ug/l	111	121	68-128	9	30
Chlordane	0.12	U	0.12	0.50	ug/l					
p,p-DDD	0.0050	U	0.0050	0.020	ug/l	115	125	71-139	8	30
p,p-DDE	0.0050	U	0.0050	0.020	ug/l	126	137*	66-130	8	30
p,p-DDT	0.0050	U	0.0050	0.020	ug/l	110	120	53-126	9	30
Delta BHC	0.0029	U	0.0029	0.010	ug/l	113	113	76-148	0	30
Dieldrin	0.0053	U	0.0053	0.020	ug/l	115	120	76-132	4	30
Endosulfan I	0.0043	U	0.0043	0.010	ug/l	93	99	68-128	6	30
Endosulfan II	0.015	U	0.015	0.020	ug/l	105	110	59-144	5	30
Endosulfan Sulfate	0.0058	U	0.0058	0.020	ug/l	125	125	71-142	0	30
Endrin	0.0081	U	0.0081	0.020	ug/l	105	120	52-132	13	30
Endrin Aldehyde	0.020	U	0.020	0.10	ug/l	125	130	68-139	4	20
Endrin Ketone	0.0050	U	0.0050	0.020	ug/l	120	125	69-146	4	30
Heptachlor	0.0026	U	0.0026	0.010	ug/l	102	102	57-126	0	30
Heptachlor Epoxide	0.0023	U	0.0023	0.010	ug/l	122	122	73-156	0	30
Methoxychlor	0.030	U	0.030	0.10	ug/l	120	130	52-133	8	30
Mirex	0.085	U	0.085	0.25	ug/l					
Toxaphene	1.0	U	1.0	3.0	ug/l					
Batch number: 103570024A	Sample number(s): 6173161-6173162									
Aroclor 5432	0.10	U	0.10	0.50	ug/l					
Aroclor 5442	0.10	U	0.10	0.50	ug/l	56*	64*	75-125	13	30
Aroclor 5460	0.10	U	0.10	0.50	ug/l					

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
PCB-1016	0.10	U	0.10	0.50	ug/l	110	114	68-119	4	30
PCB-1221	0.10	U	0.10	0.50	ug/l					
PCB-1232	0.20	U	0.20	0.50	ug/l					
PCB-1242	0.10	U	0.10	0.50	ug/l					
PCB-1248	0.10	U	0.10	0.50	ug/l					
PCB-1254	0.10	U	0.10	0.50	ug/l					
PCB-1260	0.10	U	0.10	0.50	ug/l	124*	142*	68-121	14	30
PCB-1262	0.20	U	0.20	0.50	ug/l					
PCB-1268	0.16	U	0.16	0.50	ug/l					
Batch number: 103640029A	Sample number(s): 6173160,6173163-6173169,6173171-6173177									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	85	87	75-125	2	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	97		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	127		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 103650029A	Sample number(s): 6173160,6173163-6173169,6173171-6173173									
Aldrin	0.066	U	0.066	0.17	ug/kg	139*		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	85		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	116		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	91		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	100		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	126		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	89		54-130		
Delta BHC	0.082	J	0.036	0.17	ug/kg	97		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	97		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	85		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	120		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	131		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	97		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	102		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	120		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	91		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	133*		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	102		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					
Batch number: 103620004A	Sample number(s): 6173162									
EFH (C12-C14)	0.10	U	0.10	0.60	mg/l	96	88	60-120	9	30
EFH (C15-C20)	0.10	U	0.10	0.60	mg/l	100	91	60-120	10	30
EFH (C21-C30)	0.10	U	0.10	0.60	mg/l	100	92	60-120	8	30
EFH (C30 - C40)	0.10	U	0.10	0.60	mg/l	100	93	60-120	7	30
EFH (C8-C11)	0.10	U	0.10	0.60	mg/l	72	68	60-120	6	30
Batch number: 103620026A	Sample number(s): 6173165-6173166,6173171,6173177									
EFH (C12-C14)	0.40	U	0.40	1.2	mg/kg	86		66-113		
EFH (C15-C20)	0.40	U	0.40	1.2	mg/kg	90		66-113		
EFH (C21-C30)	0.40	U	0.40	1.2	mg/kg	91		66-113		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
EFH (C30 - C40)	0.40	U	0.40	1.2	mg/kg	88		66-113		
EFH (C8-C11)	0.40	U	0.40	1.2	mg/kg	73		66-113		
Batch number: 103630029A	Sample number(s): 6173162									
Ethanol	200 U		200.	1,000	ug/l	108	100	66-132	8	20
Isopropanol	200 U		200.	1,000	ug/l	96	92	75-125	4	20
Methanol	200 U		200.	1,000	ug/l	108	104	77-137	4	20
Batch number: 103630030A	Sample number(s): 6173165-6173166									
Ethanol	100 U		100.	500	ug/kg	98	100	75-112	3	20
Isopropanol	100 U		100.	500	ug/kg	88	90	75-125	2	20
Methanol	110 J		100.	500	ug/kg	96	98	75-134	3	20
Batch number: 103630032A	Sample number(s): 6173165-6173166,6173171,6173177									
Diethylene glycol	5.0	U	5.0	13	mg/kg	101	101	75-125	1	20
Ethylene glycol	5.0	U	5.0	13	mg/kg	84	87	75-125	4	20
Propylene glycol	5.0	U	5.0	13	mg/kg	103	104	75-125	1	20
Batch number: 103640014A	Sample number(s): 6173171,6173177									
Ethanol	100 U		100.	500	ug/kg	103		75-112		
Isopropanol	100 U		100.	500	ug/kg	94		75-125		
Methanol	100 U		100.	500	ug/kg	97		75-134		
Batch number: 103640032A	Sample number(s): 6173162									
Diethylene glycol	14	U	14.	100	mg/l	95	100	78-126	5	20
Ethylene glycol	10	U	10.	100	mg/l	95	95	80-124	0	20
Propylene glycol	10	U	10.	100	mg/l	90	90	80-120	0	20
Batch number: 103620021A	Sample number(s): 6173162									
m-Terphenyl	0.080	U	0.080	0.25	mg/l	99	99	75-125	0	20
o-Terphenyl	0.080	U	0.080	0.25	mg/l	100	100	75-125	0	20
p-Terphenyl	0.080	U	0.080	0.25	mg/l	96	98	75-125	2	20
Batch number: 103640012A	Sample number(s): 6173165-6173166,6173171,6173177									
m-Terphenyl	1.5	U	1.5	3.5	mg/kg	107		75-125		
o-Terphenyl	1.5	U	1.5	3.5	mg/kg	111		75-125		
p-Terphenyl	1.5	U	1.5	3.5	mg/kg	105		75-125		
Batch number: 103575713005	Sample number(s): 6173161-6173162									
Mercury	0.000050 U		0.00005 0	0.00020	mg/l	106	103	80-120	2	20
Batch number: 103641026002A	Sample number(s): 6173160,6173163-6173177									
Antimony	0.0583	U	0.0583	0.194	mg/kg	65		11-208		
Arsenic	0.0658	J	0.0583	0.388	mg/kg	100		80-120		
Beryllium	0.0155	U	0.0155	0.0971	mg/kg	101		82-118		
Cadmium	0.0350	U	0.0350	0.0971	mg/kg	102		82-118		
Chromium	0.117	U	0.117	0.388	mg/kg	96		80-120		
Cobalt	0.0194	U	0.0194	0.0971	mg/kg	100		82-118		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Lead	0.0128 J	0.0101	0.194	mg/kg	100		80-120		
Nickel	0.146 J	0.0971	0.388	mg/kg	103		80-120		
Silver	0.0117 U	0.0117	0.0971	mg/kg	104		66-134		
Thallium	0.0291 U	0.0291	0.0971	mg/kg	104		81-119		
Zinc	0.544 U	0.544	2.91	mg/kg	100		78-122		
Batch number: 103641026002B	Sample number(s): 6173160,6173163-6173177								
Selenium	0.0389 J	0.0388	0.388	mg/kg	100		79-122		
Batch number: 103641026002C	Sample number(s): 6173160,6173163-6173177								
Molybdenum	0.0485 U	0.0485	0.0971	mg/kg	103		78-122		
Batch number: 103641026002D	Sample number(s): 6173160,6173163-6173177								
Barium	0.105 U	0.105	0.388	mg/kg	106		79-121		
Batch number: 103645708002	Sample number(s): 6173160,6173163-6173177								
Aluminum	5.76 J	4.88	19.4	mg/kg	99		61-110		
Boron	0.864 U	0.864	4.85	mg/kg	89		78-110		
Calcium	12.6 J	5.95	19.4	mg/kg	96		88-110		
Iron	4.57 U	4.57	19.4	mg/kg	93		61-110		
Lithium	0.21 U	0.21	1.9	mg/kg	99		80-120		
Magnesium	2.47 U	2.47	9.71	mg/kg	95		82-110		
Manganese	0.0757 U	0.0757	0.485	mg/kg	96		81-119		
Phosphorus	1.68 J	0.544	9.71	mg/kg	99		80-120		
Potassium	17.5 U	17.5	48.5	mg/kg	96		78-110		
Sodium	36.2 U	36.2	97.1	mg/kg	91		87-110		
Strontium	0.0650 J	0.0602	0.485	mg/kg	98		79-121		
Tin	0.971 U	0.971	9.71	mg/kg	99		90-114		
Titanium	0.369 U	0.369	0.971	mg/kg	90		80-120		
Zirconium	0.816 U	0.816	4.85	mg/kg	99		80-120		
Batch number: 103645711003	Sample number(s): 6173160,6173163-6173177								
Mercury	0.0028 U	0.0028	0.0979	mg/kg	100		88-123		
Batch number: 103651848001	Sample number(s): 6173161-6173162								
Aluminum	0.0834 U	0.0834	0.200	mg/l	96	95	90-112	1	20
Boron	0.0138 U	0.0138	0.0500	mg/l	96	95	90-110	0	20
Calcium	0.0702 U	0.0702	0.200	mg/l	98	98	90-112	0	20
Iron	0.0522 U	0.0522	0.200	mg/l	99	99	90-112	0	20
Lithium	0.0024 U	0.0024	0.0200	mg/l	102	102	80-120	0	20
Magnesium	0.0172 U	0.0172	0.100	mg/l	97	97	89-110	0	20
Manganese	0.00084 U	0.00084	0.0050	mg/l	99	98	90-110	1	20
Phosphorus	0.0089 U	0.0089	0.100	mg/l	100	100	80-120	0	20
Potassium	0.239 U	0.239	0.500	mg/l	97	98	85-115	1	20
Sodium	0.433 U	0.433	1.00	mg/l	99	98	87-114	0	20
Strontium	0.00089 U	0.00089	0.0050	mg/l	102	101	90-110	1	20
Tin	0.0098 U	0.0098	0.0200	mg/l	99	99	90-110	0	20
Titanium	0.0038 U	0.0038	0.0100	mg/l	101	100	90-113	1	20
Zirconium	0.0206 U	0.0206	0.0500	mg/l	101	101	80-120	0	20
Batch number: 103656050001A	Sample number(s): 6173161-6173162								
Antimony	0.00030 U	0.00030	0.0010	mg/l	94	102	87-110	8	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	98	102	86-111	4	20
Beryllium	0.00013 U	0.00013	0.00050	mg/l	103	103	90-112	1	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	102	106	90-114	4	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	95	97	90-118	2	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	99	101	80-120	2	20
Copper	0.00058 J	0.00038	0.0020	mg/l	100	101	90-113	1	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Lead	0.00023 J	0.000052	0.0010	mg/l	100	99	90-115	1	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	105	105	90-113	0	20
Silver	0.000080 U	0.00008 0	0.00050	mg/l	102	104	90-115	2	20
Thallium	0.00015 U	0.00015	0.00050	mg/l	107	95	89-116	12	20
Vanadium	0.00016 U	0.00016	0.00050	mg/l	94	96	80-120	3	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	101	102	80-120	2	20
Batch number: 103656050001B	Sample number(s): 6173161-6173162								
Selenium	0.00025 U	0.00025	0.0020	mg/l	102	102	85-114	0	20
Batch number: 103656050001C	Sample number(s): 6173161-6173162								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	101	101	80-120	0	20
Batch number: 103656050001D	Sample number(s): 6173161-6173162								
Barium	0.00038 U	0.00038	0.0020	mg/l	103	105	88-113	1	20
Batch number: 110101026002A	Sample number(s): 6173160,6173163-6173177								
Copper	0.0719 J	0.0660	0.400	mg/kg	98		80-120		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	95		90-110		
Batch number: 10356196903A	Sample number(s): 6173162								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	97	97	90-110	0	20
11b Anions by 300.0 - Nitrate	0.050 U	0.050	0.10	mg/l	97	97	90-110	0	20
Batch number: 10357113001A	Sample number(s): 6173161-6173162								
3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	98	99	90-110	1	20
Batch number: 10363658701A	Sample number(s): 6173161-6173162								
7b Perchlorate EPA 314.0	0.70 U	0.70	2.0	ug/l	93	96	85-115	3	20
Batch number: 10364196902A	Sample number(s): 6173161								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	104	106	90-110	2	20
Batch number: 10365117102A	Sample number(s): 6173162								
21b Cyanide by 9012B	0.0050 U	0.0050	0.010	mg/l	107	100	90-110	6	20
Batch number: 11004102201A	Sample number(s): 6173165-6173166,6173171,6173177								
21a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	107		80-120		
Batch number: 11013013201A	Sample number(s): 6173160,6173163-6173165								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	101		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	101		90-110		
Batch number: 11013013201B	Sample number(s): 6173166-6173168,6173170-6173177								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	101		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	101		90-110		
Batch number: 11013013203A	Sample number(s): 6173160,6173163-6173165								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	87		85-115		
Batch number: 11013013203B	Sample number(s): 6173167-6173168,6173170-6173177								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	87		85-115		
Batch number: 11017017201A	Sample number(s): 6173166								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	93		85-115		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11017243201A	Sample number(s): 6173160,6173163-6173168,6173170-6173177									
3a Cr VI by EPA 7199	0.20	U	0.20	1.0	mg/kg	96		80-120		
Batch number: 10361039402B	Sample number(s): 6173160,6173163-6173164									
22a pH by 9045C						100		95-105		
Batch number: 10361039403A	Sample number(s): 6173165-6173167,6173170-6173176									
22a pH by 9045C						101		95-105		
Batch number: 10361039403B	Sample number(s): 6173177									
22a pH by 9045C						101		95-105		
Batch number: 10361182102B	Sample number(s): 6173160,6173163-6173164									
Oxidation Reduction Potential						100		98-102		
Batch number: 10361182103A	Sample number(s): 6173165-6173167,6173170-6173176									
Oxidation Reduction Potential						100		98-102		
Batch number: 10361182103B	Sample number(s): 6173177									
Oxidation Reduction Potential						100		98-102		
Batch number: 11007162401B	Sample number(s): 6173160,6173163-6173164,6173167-6173170,6173172-6173176									
28a Moisture Content by 160.3						100		80-120		
28a Moisture Content by 160.3						100		80-120		
28a Moisture Content by 160.3						100		80-120		
Batch number: 11014162401A	Sample number(s): 6173165-6173166,6173171,6173177									
28a Moisture Content by 160.3						100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B103621AA	Sample number(s): 6173165-6173166,6173171,6173174-6173175,6173177 UNSPK: 6173165								
Acetone	95		15-210						
Benzene	106		55-143						
Bromobenzene	84		43-139						
Bromochloromethane	104		60-137						
Bromodichloromethane	97		53-136						
Bromoform	85		38-124						
Bromomethane	68		42-168						
2-Butanone	87		37-163						
n-Butylbenzene	83		30-146						
sec-Butylbenzene	87		33-157						
tert-Butylbenzene	85		41-152						
Carbon Tetrachloride	107		45-153						
Chlorobenzene	92		49-135						
Chloroethane	69		39-152						
2-Chloroethyl Vinyl Ether	98		32-139						
Chloroform	105		61-142						
Chloromethane	92		51-163						

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2-Chlorotoluene	86		42-146						
4-Chlorotoluene	85		39-145						
1,2-Dibromo-3-chloropropane	73		30-139						
Dibromochloromethane	90		51-128						
1,2-Dibromoethane	91		54-129						
Dibromomethane	100		57-130						
1,2-Dichlorobenzene	79		36-133						
1,3-Dichlorobenzene	79		34-134						
1,4-Dichlorobenzene	79		35-136						
Dichlorodifluoromethane	84		26-151						
1,1-Dichloroethane	106		63-142						
1,2-Dichloroethane	102		68-131						
1,1-Dichloroethene	110		61-149						
cis-1,2-Dichloroethene	105		60-136						
trans-1,2-Dichloroethene	108		59-142						
1,2-Dichloropropane	102		62-135						
1,3-Dichloropropane	93		58-129						
2,2-Dichloropropane	101		53-147						
1,1-Dichloropropene	106		54-145						
cis-1,3-Dichloropropene	89		51-131						
trans-1,3-Dichloropropene	83		49-129						
Ethylbenzene	94		44-141						
Freon 113	112		56-156						
Hexachlorobutadiene	68		10-155						
2-Hexanone	60		32-160						
Isopropylbenzene	91		38-144						
p-Isopropyltoluene	85		29-152						
Methyl Tertiary Butyl Ether	93		55-129						
4-Methyl-2-pentanone	70		46-139						
Methylene Chloride	97		61-141						
n-Propylbenzene	91		39-157						
Styrene	89		35-134						
1,1,1,2-Tetrachloroethane	94		52-130						
1,1,2,2-Tetrachloroethane	83		40-152						
Tetrachloroethene	98		42-149						
Toluene	98		50-146						
1,2,3-Trichlorobenzene	59		10-140						
1,2,4-Trichlorobenzene	58		10-136						
1,1,1-Trichloroethane	107		64-142						
1,1,2-Trichloroethane	94		54-139						
Trichloroethene	102		53-144						
Trichlorofluoromethane	92		47-163						
1,2,3-Trichloropropane	84		45-154						
1,2,4-Trimethylbenzene	85		37-149						
1,3,5-Trimethylbenzene	87		38-150						
Vinyl Chloride	93		50-154						
m+p-Xylene	95		44-137						
o-Xylene	89		42-137						
Batch number: E103562AB	Sample number(s): 6173162,6173178 UNSPK: P171167								
1,4-Dioxane	109		50-150						
Batch number: 10363SLG026	Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: P172090								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
N-Nitrosodimethylamine	69*	69*	70-130	0	30				
Batch number: 10363SLK026	Sample number(s): 6173160,6173163-6173169,6173171-6173177 UNSPK: 6173167								
Acenaphthene	95	97	75-115	2	30				
Acenaphthylene	98	99	49-126	0	30				
Aniline	60	55	14-114	8	30				
Anthracene	100	97	75-115	2	30				
Benzidine	38	49	35-141	24	30				
Benzo(a)anthracene	97	96	65-122	1	30				
Benzo(a)pyrene	86	87	57-126	2	30				
Benzo(b)fluoranthene	87	87	59-125	0	30				
Benzo(g,h,i)perylene	77	81	59-127	4	30				
Benzo(k)fluoranthene	91	89	56-132	2	30				
Benzoic acid	97	101	10-173	4	30				
Benzyl alcohol	91	88	55-123	4	30				
4-Bromophenyl-phenylether	92	91	67-129	1	30				
Butylbenzylphthalate	108	109	73-134	1	30				
Di-n-butylphthalate	97	96	67-123	1	30				
Carbazole	97	96	64-120	1	30				
4-Chloro-3-methylphenol	98	98	53-130	0	30				
4-Chloroaniline	58	55	23-95	4	30				
bis(2-Chloroethoxy)methane	98	94	54-117	4	30				
bis(2-Chloroethyl)ether	85	82	60-116	3	30				
bis(2-Chloroisopropyl)ether	86	82	55-142	5	30				
2-Chloronaphthalene	81	81	50-141	0	30				
2-Chlorophenol	97	91	73-121	6	30				
4-Chlorophenyl-phenylether	97	100	64-119	3	30				
Chrysene	94	93	62-128	1	30				
Dibenz(a,h)anthracene	83	83	65-125	1	30				
Dibenzofuran	97	97	71-112	0	30				
1,2-Dichlorobenzene	85	79	66-108	8	30				
1,3-Dichlorobenzene	78	74	63-109	6	30				
1,4-Dichlorobenzene	80	76	53-113	5	30				
3,3'-Dichlorobenzidine	75	74	25-123	1	30				
2,4-Dichlorophenol	99	98	78-117	1	30				
Diethylphthalate	95	96	66-118	1	30				
2,4-Dimethylphenol	98	98	56-130	1	30				
3,5-Dimethylphenol	104	103	70-130	1	30				
Dimethylphthalate	94	94	64-118	0	30				
4,6-Dinitro-2-methylphenol	77	76	10-148	1	30				
2,4-Dinitrophenol	71	72	20-143	1	30				
2,4-Dinitrotoluene	99	104	57-114	4	30				
2,6-Dinitrotoluene	98	100	69-123	2	30				
1,2-Diphenylhydrazine	106	102	71-129	4	30				
bis(2-Ethylhexyl)phthalate	103	103	63-122	0	30				
Fluoranthene	99	98	59-122	1	30				
Fluorene	96	97	60-125	1	30				
Hexachlorobenzene	98	98	61-111	0	30				
Hexachlorobutadiene	95	94	62-120	1	30				
Hexachlorocyclopentadiene	64	54	10-153	17	30				
Hexachloroethane	82	78	57-109	5	30				
Indeno(1,2,3-cd)pyrene	81	82	61-126	2	30				
Isophorone	94	91	51-118	3	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1-Methylnaphthalene	95	93	73-112	2	30				
2-Methylnaphthalene	90	87	76-114	3	30				
2-Methylphenol	94	91	47-142	3	30				
4-Methylphenol	91	87	55-126	4	30				
Naphthalene	89	86	72-116	4	30				
2-Nitroaniline	105	105	67-125	0	30				
3-Nitroaniline	98	99	59-122	1	30				
4-Nitroaniline	81	84	52-112	4	30				
Nitrobenzene	99	98	51-114	1	30				
2-Nitrophenol	98	97	74-115	1	30				
4-Nitrophenol	108	110	39-133	2	30				
N-Nitroso-di-n-propylamine	90	85	60-116	5	30				
N-Nitrosodimethylamine	78	73	47-116	6	30				
N-Nitrosodiphenylamine	96	96	86-145	1	30				
Di-n-octylphthalate	100	98	56-126	2	30				
Pentachlorophenol	84	76	17-149	10	30				
Phenanthrene	96	95	65-125	1	30				
Phenol	95	91	58-126	5	30				
Pyrene	104	108	51-151	4	30				
1,2,4-Trichlorobenzene	93	91	72-115	3	30				
2,4,5-Trichlorophenol	100	103	34-139	3	30				
2,4,6-Trichlorophenol	106	105	49-140	1	30				
Batch number: 10365SLA026	Sample number(s): 6173160,6173163-6173169,6173171-6173177 UNSPK: 6173167								
Acenaphthene	92	91	63-105	0	30				
Acenaphthylene	94	103	55-126	8	30				
Anthracene	89	88	46-136	1	30				
Benzo(a)anthracene	80	87	39-144	7	30				
Benzo(a)pyrene	77	87	34-156	10	30				
Benzo(b)fluoranthene	78	86	43-155	7	30				
Benzo(g,h,i)perylene	56	56	33-141	0	30				
Benzo(k)fluoranthene	86	100	42-144	14	30				
Butylbenzylphthalate	109	108	73-140	0	30				
Di-n-butylphthalate	100	108	78-160	6	30				
Chrysene	72	81	29-156	10	30				
Dibenz(a,h)anthracene	76	77	41-130	1	30				
Diethylphthalate	115	108	87-131	7	30				
Dimethylphthalate	106	111	74-118	5	30				
Bis(2-Ethylhexyl)phthalate	84	99	39-167	13	30				
Fluoranthene	63	76	26-166	13	30				
Fluorene	94	94	45-121	0	30				
Indeno(1,2,3-cd)pyrene	70	71	21-143	1	30				
1-Methylnaphthalene	92	89	72-123	3	30				
2-Methylnaphthalene	85	81	28-121	5	30				
Naphthalene	90	87	61-102	3	30				
N-Nitrosodimethylamine	103	103	48-113	0	30				
Di-n-octylphthalate	104	116	40-192	11	30				
Phenanthrene	82	83	12-165	1	30				
Pyrene	54	65	15-153	12	30				
Batch number: 10357A34B	Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: P172090								
9a TPH by EPA 8015B Gas C5-C12	73	74	39-118	15	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 103650008A	Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: P172105								
4-Amino-2,6-Dinitrotoluene	99	95	80-127	4	50				
2-Amino-4,6-Dinitrotoluene	100	96	80-137	4	50				
1,3-Dinitrobenzene	103	98	38-166	5	50				
2,4-Dinitrotoluene	100	95	80-131	5	50				
2,6-Dinitrotoluene	105	100	80-127	5	50				
HMX	85	82	63-128	4	50				
Nitrobenzene	107	100	80-125	7	50				
Nitroglycerin	88	86	80-120	3	50				
2-Nitrotoluene	108	102	80-122	5	50				
3-Nitrotoluene	108	103	72-119	5	50				
4-Nitrotoluene	107	103	80-125	4	50				
PETN	97	93	80-121	5	50				
RDX	91	89	75-129	2	50				
Tetryl	105	101	55-174	4	50				
1,3,5-Trinitrobenzene	112	107	82-126	5	50				
2,4,6-Trinitrotoluene	102	98	82-130	4	50				
Batch number: 103610005A	Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: P172090								
17a Formaldehyde by 8315A	62*	70*	80-120	3	50				
Batch number: 110040014A	Sample number(s): 6173160,6173163-6173169,6173171-6173173 UNSPK: 6173167								
2,4-D	125	117	28-161	6	35				
Dalapon	67	59	12-86	13	50				
2,4-DB	95	82	20-170	14	50				
Dicamba	105	102	33-120	2	50				
Dinoseb	12	6	1-44	69*	35				
2,4-DP (Dichlorprop)	101	98	55-141	3	50				
MCPA	103	83	31-184	22	50				
MCPP (Mecoprop)	99	80	16-174	22	50				
2,4,5-T	83	75	25-132	9	35				
2,4,5-TP	86	83	10-183	3	35				
Batch number: 110040016A	Sample number(s): 6173164,6173175 UNSPK: P167468								
6a Perchlorate EPA 6850	110	110	80-120	0	20				
Batch number: 103640029A	Sample number(s): 6173160,6173163-6173169,6173171-6173177 UNSPK: 6173167								
PCB-1016	131	167*	29-146	24	50				
PCB-1260	136	149	39-149	9	50				
Batch number: 103650029A	Sample number(s): 6173160,6173163-6173169,6173171-6173173 UNSPK: 6173167								
Aldrin	103	94	16-126	9	50				
Alpha BHC	67	61	10-129	10	50				
Beta BHC	72	66	14-147	9	50				
Gamma BHC - Lindane	76	61	10-140	22	50				
p,p-DDD	66	72	16-163	9	50				
p,p-DDE	102	102	18-161	0	50				
p,p-DDT	77	65	10-176	17	50				
Delta BHC	69	75	23-140	9	50				
Dieldrin	68	71	19-154	4	50				
Endosulfan I	55	55	16-137	0	50				
Endosulfan II	82	85	28-154	4	50				
Endosulfan Sulfate	92	108	21-160	15	50				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Endrin	70	67	11-149	4	50				
Endrin Aldehyde	61	67	10-148	10	35				
Endrin Ketone	91	89	22-165	2	50				
Heptachlor	85	70	13-126	20	50				
Heptachlor Epoxide	94	88	13-157	7	50				
Methoxychlor	73	72	32-147	1	50				
Batch number: 103620026A	Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: P172090								
EFH (C12-C14)	74	69	49-123	7	20				
EFH (C15-C20)	97	90	49-123	8	20				
EFH (C21-C30)	55	41*	49-123	11	20				
EFH (C30 - C40)	17*	-23*	49-123	29*	20				
EFH (C8-C11)	54	56	49-123	4	20				
Batch number: 103630030A	Sample number(s): 6173165-6173166 UNSPK: P173171								
Ethanol	77	72	24-143	6	20				
Isopropanol	68*	66*	75-125	3	20				
Methanol	76	74	45-136	3	20				
Batch number: 103630032A	Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: 6173171								
Diethylene glycol	68	77	59-109	11	20				
Ethylene glycol	63	68	63-107	8	20				
Propylene glycol	73	80	63-107	10	20				
Batch number: 103640014A	Sample number(s): 6173171,6173177 UNSPK: P172090								
Ethanol	88	88	24-143	1	20				
Isopropanol	80	80	75-125	0	20				
Methanol	77	81	45-136	5	20				
Batch number: 103640012A	Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: P172090								
m-Terphenyl	105	104	75-125	1	20				
o-Terphenyl	110	108	75-125	1	20				
p-Terphenyl	104	103	75-125	1	20				
Batch number: 103641026002A	Sample number(s): 6173160,6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Antimony	32*	35*	75-125	7	20	0.104 J	0.0600 U	200* (1)	20
Arsenic	174*	113	75-125	23*	20	2.77	3.75	30*	20
Beryllium	110	97	75-125	10	20	0.347	0.417	18 (1)	20
Cadmium	109	109	75-125	2	20	0.104	0.113	8 (1)	20
Chromium	112	110	75-125	2	20	12.9	14.4	11	20
Cobalt	94	95	75-125	1	20	4.55	4.81	6	20
Lead	120	112	75-125	4	20	4.31	4.54	5	20
Nickel	118	107	75-125	7	20	8.93	10.1	12	20
Silver	108	110	75-125	0	20	0.0262 J	0.0284 J	8 (1)	20
Thallium	106	113	75-125	3	20	0.210	0.217	3 (1)	20
Zinc	115 (2)	153 (2)	75-125	6	20	49.2	50.2	2	20
Batch number: 103641026002B	Sample number(s): 6173160,6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Selenium	89	89	75-125	2	20	0.109 J	0.0972 J	12 (1)	20
Batch number: 103641026002C	Sample number(s): 6173160,6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Molybdenum	105	107	75-125	0	20	0.385	0.450	16 (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 103641026002D	Sample number(s): 6173160,6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Barium	148 (2)	277 (2)	75-125	11	20	87.6	86.5	1	20
Batch number: 103645708002	Sample number(s): 6173160,6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Aluminum	1246 (2)	-101 (2)	75-125	18	20	13,300	12,500	6	20
Boron	88	89	84-115	6	20	4.41 J	3.66 J	19 (1)	20
Calcium	-91 (2)	-256 (2)	75-125	18	20	4,470	2,710	49*	20
Iron	7037 (2)	90 (2)	75-125	31*	20	18,100	16,000	12	20
Lithium	104	95	82-114	3	20	19.8	18.2	9	20
Magnesium	856 (2)	153 (2)	75-125	25*	20	4,260	3,750	13	20
Manganese	207 (2)	109 (2)	75-125	14	20	243	240	1	20
Phosphorus	144*	142*	75-125	1	20	364	314	15	20
Potassium	165*	170*	75-125	3	20	2,620	2,450	7	20
Sodium	94	98	75-125	9	20	82.2 J	82.5 J	0 (1)	20
Strontium	91	87	75-115	1	20	22.0	16.6	28*	20
Tin	89	90	80-110	6	20	1.95 J	1.94 J	0 (1)	20
Titanium	393 (2)	358 (2)	75-125	1	20	973	979	1	20
Zirconium	95	96	75-125	5	20	2.59 J	2.01 J	25* (1)	20
Batch number: 103645711003	Sample number(s): 6173160,6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Mercury	95	99	65-135	4	20	0.0139 J	0.0120 J	14 (1)	20
Batch number: 110101026002A	Sample number(s): 6173160,6173163-6173177 UNSPK: 6173167 BKG: 6173167								
Copper	103	102	75-125	1	20	11.6	8.43	32*	20
Vanadium	72 (2)	78 (2)	75-125	1	20	41.7	30.1	32*	20
Batch number: 11004102201A	Sample number(s): 6173165-6173166,6173171,6173177 UNSPK: 6173165 BKG: 6173165								
21a Cyanide by 9012B	110		75-125			0.18 U	0.17 U	0 (1)	20
Batch number: 11013013201A	Sample number(s): 6173160,6173163-6173165 UNSPK: P172316 BKG: P172316								
11a Anions by 300.0 - Fluoride	81		80-120			0.89 J	0.81 J	10 (1)	20
11a Anions by 300.0 - Nitrate	94		80-120			5.2	4.5	15 (1)	20
Batch number: 11013013201B	Sample number(s): 6173166-6173168,6173170-6173177 UNSPK: 6173167 BKG: 6173167								
11a Anions by 300.0 - Fluoride	79*		80-120			1.3	1.7	32* (1)	20
11a Anions by 300.0 - Nitrate	100		80-120			0.80 U	0.81 J	200* (1)	20
Batch number: 11013013203A	Sample number(s): 6173160,6173163-6173165 UNSPK: P172316 BKG: P172316								
7a Perchlorate EPA 314.0	84		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11013013203B	Sample number(s): 6173167-6173168,6173170-6173177 UNSPK: 6173167 BKG: 6173167								
7a Perchlorate EPA 314.0	87		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11017017201A	Sample number(s): 6173166 UNSPK: 6173166 BKG: 6173166								
7a Perchlorate EPA 314.0	95		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11017243201A	Sample number(s): 6173160,6173163-6173168,6173170-6173177 UNSPK: 6173167 BKG: 6173167								
3a Cr VI by EPA 7199	99		75-125			0.26 J	0.39 J	42* (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10361039402B	Sample number(s): 6173160,6173163-6173164 BKG: P172316								
22a pH by 9045C						6.51	6.46	1	1
Batch number: 10361039403A	Sample number(s): 6173165-6173167,6173170-6173176 BKG: 6173167								
22a pH by 9045C						7.70	7.76	1	1
Batch number: 10361039403B	Sample number(s): 6173177 BKG: 6173177								
22a pH by 9045C						5.91	5.89	0	1
Batch number: 10361182102B	Sample number(s): 6173160,6173163-6173164 BKG: P172316								
Oxidation Reduction Potential						536	541	1	6
Batch number: 10361182103A	Sample number(s): 6173165-6173167,6173170-6173176 BKG: 6173167								
Oxidation Reduction Potential						459	457	0	6
Batch number: 10361182103B	Sample number(s): 6173177 BKG: 6173177								
Oxidation Reduction Potential						618	619	0	6
Batch number: 11007162401B	Sample number(s): 6173160,6173163-6173164,6173167-6173170,6173172-6173176 BKG: 6173167								
28a Moisture Content by 160.3						13.9	12.7	8	20
28a Moisture Content by 160.3						13.9	12.7	8	20
28a Moisture Content by 160.3						13.9	12.7	8	20
Batch number: 11014162401A	Sample number(s): 6173165-6173166,6173171,6173177 BKG: P182836								
28a Moisture Content by 160.3						12.3	13.1	6	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 1a Volatile Organics EPA 8260B
Batch number: B103621AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6173165	104	100	98	89
6173166	106	103	97	86
6173171	106	102	95	91
6173174	107	104	94	92
6173175	106	104	97	88
6173177	109	110	95	93
Blank	105	103	95	92
LCS	101	102	98	101
LCSD	100	102	99	100
MS	101	104	98	101
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 14b 1,4-Dioxane by 8260B SIM

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Surrogate Quality Control

Batch number: E103562AB

	Toluene-d8
6173162	102
6173178	102
Blank	101
LCS	100
LCSD	101
MS	101
Limits:	80-120

Analysis Name: 14a 1,4-Dioxane by 8260B SIM
Batch number: E103631AA

	Toluene-d8
6173165	99
6173166	98
6173171	98
6173174	99
6173175	99
6173177	99
Blank	99
LCS	98
LCSD	98
Limits:	70-130

Analysis Name: 1b Volatile Organics EPA8260
Batch number: Y103631AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6173162	98	98	99	96
6173178	98	101	99	97
Blank	98	100	100	97
LCS	99	98	101	100
LCSD	99	99	101	100
Limits:	86-118	80-120	88-110	86-115

Analysis Name: 19b NDMA by 1625C
Batch number: 10362WAA026

	N-Nitrosodimethylamine-d6
6173162	148
Blank	101
LCS	97
LCSD	102
Limits:	50-150

Analysis Name: 4b Select SVOC EPA 8270SIM
Batch number: 10362WAC026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6173161	120	79	86

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Surrogate Quality Control

6173162	87	78	87
Blank	90	85	93
LCS	93	84	88
LCSD	87	80	88
Limits:	40-130	45-130	45-135

Analysis Name: 5b Semivolatiles by EPA 8270C
Batch number: 10362WAE026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6173161	57	40	96	84	87	86
6173162	50	34	98	83	87	90
Blank	49	36	96	83	85	83
LCS	64	48	98	92	93	87
LCSD	61	47	102	93	94	86
Limits:	20-130	20-120	30-130	40-130	45-130	45-135

Analysis Name: 19a NDMA by 1625C
Batch number: 10363SLG026

	N-Nitrosodimethylamine-d6
6173165	733*
6173166	515*
6173171	592*
6173177	596*
Blank	104
LCS	110
MS	152*
MSD	151*
Limits:	50-150

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 10363SLK026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6173160	92	90	113	85	91	93
6173163	95	93	114	87	92	106
6173164	87	85	106	82	89	94
6173165	87	87	109	84	91	86
6173166	88	85	103	79	86	87
6173167	95	93	112	84	94	97
6173168	92	91	113	91	90	93
6173169	88	86	114	89	91	97
6173171	91	89	106	82	88	91
6173172	82	80	103	78	86	89
6173173	86	87	99	80	92	88
6173174	87	88	101	84	94	90
6173175	85	85	97	81	91	82
6173176	88	88	102	81	93	84
6173177	87	87	100	80	96	85
Blank	90	92	102	84	92	87
LCS	94	94	116	88	92	86
MS	92	91	113	91	90	93

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Surrogate Quality Control

MSD	88	86	114	89	91	97
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 10365SLA026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6173160	92	84	90
6173163	93	84	80
6173164	89	83	82
6173165	91	86	83
6173166	90	85	80
6173167	90	85	80
6173168	97	90	75
6173169	96	96	79
6173171	94	86	88
6173172	88	87	86
6173173	97	89	85
6173174	90	83	89
6173175	90	94	83
6173176	88	78	78
6173177	98	97	75
Blank	80	81	83
LCS	96	89	89
MS	97	90	75
MSD	96	96	79
Limits:	40-130	45-130	45-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 10357A34B

	Trifluorotoluene-F
6173165	82
6173166	86
6173171	103
6173177	87
Blank	96
LCS	91
LCSD	96
MS	84
MSD	85
Limits:	61-122

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12
Batch number: 10363B20A

	Trifluorotoluene-F
6173162	82
6173178	84
Blank	83
LCS	106
LCSD	107
Limits:	63-135

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Surrogate Quality Control

Analysis Name: 17b Formaldehyde by 8315A
Batch number: 103560024A

	Butyraldehyde
6173162	117
Blank	92
LCS	97
LCSD	102
Limits:	45-145

Analysis Name: 12b Pesticides by 8081A
Batch number: 103570023A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6173161	133	127
6173162	137	135
Blank	102	107
LCS	105	115
LCSD	105	115
Limits:	52-141	40-144

Analysis Name: 8b PCBs/PCTs by 8082
Batch number: 103570024A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6173161	127	137*
6173162	122	126*
Blank	109	107
LCS	107	104
LCSD	109	114
Limits:	30-150	45-120

Analysis Name: 17a Formaldehyde by 8315A
Batch number: 103610005A

	Butyraldehyde
6173165	106
6173166	112
6173171	106
6173177	95
Blank	92
LCS	97
MS	102
MSD	102
Limits:	64-126

Analysis Name: 20b Energetics by 8330A
Batch number: 103610006A

	2-Nitro-m-xylene
6173162	85
Blank	85

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Surrogate Quality Control

LCS	97
LCSD	90
Limits:	50-134

Analysis Name: 13b Herbicides by EPA 8151
Batch number: 103620008A

	2,4-Dichlorophenylacetic acid
6173161	97
6173162	133
Blank	108
LCS	124
LCSD	114
Limits:	35-144

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 103640029A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6173160	146*	124*
6173163	114	119
6173164	105	109
6173165	88	104
6173166	110	104
6173167	95	99
6173168	94	95
6173169	103	103
6173171	102	88
6173172	103	105
6173173	90	106
6173174	82	90
6173175	115	123*
6173176	131	129*
6173177	124	113
Blank	103	111
LCS	103	108
LCSD	130	137*
MS	94	95
MSD	103	103
Limits:	53-139	45-120

Analysis Name: 20a Energetics by 8330A
Batch number: 103650008A

	2-Nitro-m-xylene
6173165	117
6173166	122
6173171	113
6173177	118
Blank	123
LCS	120
LCSD	115
MS	121

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Surrogate Quality Control

MSD	116	

Limits: 80-146

Analysis Name: 12a Pesticides by 8081A
Batch number: 103650029A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6173160	75	115
6173163	71	83
6173164	40*	67
6173165	78	78
6173166	73	86
6173167	56	49
6173168	73	78
6173169	56	74
6173171	73	128*
6173172	76	57
6173173	71	95
Blank	81	116
LCS	79	116
MS	73	78
MSD	56	74

Limits: 50-130 20-120

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 110040014A

	2,4-Dichlorophenylacetic acid
6173160	112
6173163	116
6173164	85
6173165	101
6173166	137
6173167	112
6173168	105
6173169	89
6173171	87
6173172	88
6173173	90
Blank	107
LCS	67
MS	105
MSD	89

Limits: 36-156

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel
Batch number: 103620004A

	Chlorobenzene	Orthoterphenyl
6173162	83	85
Blank	61	76
LCS	84	94
LCSD	79	87

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Surrogate Quality Control

Limits: 28-152 52-131

Analysis Name: 26b Terphenyls by 8015B
Batch number: 103620021A

	n-Triacontane-d62
6173162	99
Blank	94
LCS	90
LCSD	91

Limits: 50-150

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 103620026A

	Chlorobenzene	Orthoterphenyl
6173165	60	73
6173166	69	80
6173171	60	79
6173177	52	67
Blank	75	85
LCS	79	88
MS	76	84
MSD	75	84

Limits: 37-125 47-145

Analysis Name: 25b Alcohols by 8015B
Batch number: 103630029A

	Acetone
6173162	129
Blank	124
LCS	125
LCSD	119

Limits: 54-147

Analysis Name: 25a Alcohols by 8015B
Batch number: 103630030A

	Acetone
6173165	84
6173166	87
Blank	98
LCS	96
LCSD	99
MS	86
MSD	86

Limits: 42-138

Analysis Name: 27a Glycols by 8015B
Batch number: 103630032A

	Tetramethylene glycol

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226926
Reported: 02/01/11 at 10:05 AM

Surrogate Quality Control

6173165	83
6173166	86
6173171	76
6173177	85
Blank	102
LCS	107
LCSD	105
MS	76
MSD	82
Limits:	50-119

Analysis Name: 26a Terphenyls by 8015B
Batch number: 103640012A

	n-Triacontane-d62
6173165	95
6173166	121
6173171	91
6173177	106
Blank	103
LCS	102
MS	99
MSD	98
Limits:	50-150

Analysis Name: 25a Alcohols by 8015B
Batch number: 103640014A

	Acetone
6173171	73
6173177	86
Blank	99
LCS	95
MS	85
MSD	85
Limits:	42-138

Analysis Name: 27b Glycols by 8015B
Batch number: 103640032A

	Tetramethylene glycol
6173162	90
Blank	97
LCS	122
LCSD	111
Limits:	10-164

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

13013 1226926 6173160-78

CHAIN OF CUSTODY RECORD

CDM | SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-GRO EPA 8015B	**TPH-EFH EPA 8015B Mod.	*Metals EPA 6010/6020B& 7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Chlorin/furan EPA 3540	*Perchlorate EPA 314.0	PercNorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
DUP10-SA5B-QC-122210	12.22.10	0905	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									SURFACE DUP
EB08-SA5B-122210	12.22.10	1145	water	none	6-1 liter ambers			X						X	X			X	X									surface tool rinsate
EB08-SA5B-122210	12.22.10	1145	water	none	1-500 ml poly							X	X			X												surface tool rinsate
EB08-SA5B-122210	12.22.10	1145	water	HNO3	1-500 ml poly						X																	surface tool rinsate
FB06-SA5B-~~122110~~ 122210	12.22.10	1330	water	HCl	6-40 mL VOA vials	X	X																					
FB06-SA5B-~~122110~~	12.22.10	1330	water	none	6-1 liter ambers			X						X	X			X	X									surface tool rinsate
FB06-SA5B-~~122110~~	12.22.10	1330	water	none	1-500 ml poly							X	X			X												surface tool rinsate
FB06-SA5B-~~122110~~	12.22.10	1330	water	HNO3	1-500 ml poly						X																	surface tool rinsate
FB06-SA5B-~~122110~~	12.22.10	1330	water	HCl	5-40-mL VOA vials				X																		X	surface tool rinsate
FB06-SA5B-~~122110~~	12.22.10	1330	water	none	4-40 mL VOA vials															X						X		surface tool rinsate
FB06-SA5B-~~122110~~	12.22.10	1330	water	none	4-1L ambers					X												X	X		X			surface tool rinsate
FB06-SA5B-~~122110~~	12.22.10	1330	water	none	1-250 mL glass bottle																X							surface tool rinsate
FB06-SA5B-~~122110~~	12.22.10	1330	water	NaOH	1-500 mL poly																			X				surface tool rinsate
SED-010-SIV-SD-0.0-0.5	12.22.10	1010	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-101-SA5B-SS-0.0-0.5	12.22.10	0900	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X									
SL-117-SA5B-SS-0.0-0.5	12.22.10	0925	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-117-SA5B-SS-0.0-0.5	12.22.10	0925	soil	none	1 x 16 oz. jar					X										X	X	X	X	X	X	X	X	
SL-117-SA5B-SS-0.0-0.5	12.22.10	~~0910~~ 925	soil	none	5 Encore Samplers	X	X		X																			
SL-118-SA5B-SS-0.0-0.5	12.22.10	0910	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-118-SA5B-SS-0.0-0.5	12.22.10	0910	soil	none	1 x 16 oz. jar					X										X	X	X	X	X	X	X	X	
SL-118-SA5B-SS-0.0-0.5	12.22.10	0910	soil	none	5 Encore Samplers	X	X		X																			
SL-100-SA5B-SS-0.0-0.5MS	12.22.10	0902	soil	none	2 16 oz. jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X									surface MS/MSD
SL-114-SA5B-SS-0.0-0.5	12.22.10	0922	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-114-SA5B-SS-0.0-0.5	12.22.10	0922	soil	none	1 x 16 oz. jar					X										X	X	X	X	X	X	X	X	
SL-114-SA5B-SS-0.0-0.5	12.22.10	0922	soil	none	5 Encore Samplers	X	X		X																			
SL-102-SA5B-SS-0.0-0.5	12.22.10	0936	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-024-SA5B-SS-0.0-0.5	12.22.10	1001	soil	none	1 x 16 oz. jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									
SL-157-SA5B-SB-4.0-5.0	12.22.10	1048	soil	none	2 16 oz jars			X		X	X	X	X	X	X	X												
SL-157-SA5B-SB-4.5	12.22.10	1045	soil	none	4 Encore Samplers	X	X																					
SL-158-SA5B-SB-4.0-5.0	12.22.10	1209	soil	none	2 16 oz jars			X		X	X	X	X	X	X	X	X											
SL-158-SA5B-SB-4.5	12.22.10	1201	soil	none	4 Encore Samplers	X	X																					
SL-157 ~~SL-158-SA5B-SB-9.0-10.0~~	12.22.10	1052	soil	none	2 16 oz jars			X			X	X	X	X	X	X												
SL-145-SA5B-SB-4.0-5.0	12.22.10	1454	soil	none	4 16 oz jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	
SL-145-SA5B-SB-4.5	12.22.10	1450	soil	none	5 Encore Samplers	X	X		X																			
TB-122210	12.22.10	1300	water	HCl	4-40 mL clear VOA vials	X	X		X																			trip blank

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Laboratory:
	12.22.10 1630		12/23/10 1120	Lancaster Laboratories, Inc.
Relinquished by: (Signature)	Date/Time	Airbill No: Tracking Numbers 8695 1431 7947 8695 1431 7958, 8695 1431 9880, 8695 1431 9891, 8695 1432 3563		No. of coolers = 5

SL-158-SA5B-SB-9.0-10.0 was changed to SL-157-SA5B-SB-9.0-10.0, the collection date in the field blank ID was updated to 122210, and the collection time for SL-117-SA5B-SS-0.0-0.5 (encores) was updated to 9:25 per PB on 12/23/10.

NLM 12/28/10

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 10, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 12/23/2010
Group Number: 1226931
SDG: DX034
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
DUP10-SA5B-QC-122210 Soil	6173197
EB08-SA5B-122210 Water	6173198
FB06-SA5B-122210 Water	6173199
SED-010-SIV-SD-0.0-0.5 Sediment	6173200
SL-101-SA5B-SS-0.0-0.5 Soil	6173201
SL-117-SA5B-SS-0.0-0.5 Soil	6173202
SL-118-SA5B-SS-0.0-0.5 Soil	6173203
SL-100-SA5B-SS-0.0-0.5 Soil	6173204
SL-100-SA5B-SS-0.0-0.5MS Soil	6173205
SL-100-SA5B-SS-0.0-0.5MSD Soil	6173206
SL-114-SA5B-SS-0.0-0.5 Soil	6173207
SL-102-SA5B-SS-0.0-0.5 Soil	6173208
SL-024-SA5B-SS-0.0-0.5 Soil	6173209
SL-157-SA5B-SB-4.0-5.0 Soil	6173210
SL-158-SA5B-SB-4.0-5.0 Soil	6173211
SL-157-SA5B-SB-9.0-10.0 Soil	6173212
SL-145-SA5B-SB-4.0-5.0 Soil	6173213

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO CDM Federal Services Program Attn: Todd Burgesser

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173197
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP10 SDG#: DX034-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	13.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173197
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP10 SDG#: DX034-01FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0317	JQ	0.0284	1.16	1
11031	12378-PeCDD	40321-76-4	0.284	JQ	0.0622	5.79	1
11031	123478-HxCDD	39227-28-6	0.660	JB	0.0756	5.79	1
11031	123678-HxCDD	57653-85-7	2.62	J	0.0762	5.79	1
11031	123789-HxCDD	19408-74-3	1.12	J	0.0761	5.79	1
11031	1234678-HpCDD	35822-46-9	69.0	B	0.110	5.79	1
11031	OCDD	3268-87-9	666	B	0.0924	11.6	1
11031	2378-TCDF	51207-31-9	0.0492	U	0.0492	1.16	1
11031	12378-PeCDF	57117-41-6	0.214	JBQ	0.0151	5.79	1
11031	23478-PeCDF	57117-31-4	0.184	JB	0.0181	5.79	1
11031	123478-HxCDF	70648-26-9	0.456	JB	0.0524	5.79	1
11031	123678-HxCDF	57117-44-9	0.328	JBQ	0.0348	5.79	1
11031	123789-HxCDF	72918-21-9	0.211	JBQ	0.0429	5.79	1
11031	234678-HxCDF	60851-34-5	0.501	JB	0.0359	5.79	1
11031	1234678-HpCDF	67562-39-4	5.71	JB	0.0402	5.79	1
11031	1234789-HpCDF	55673-89-7	0.693	JB	0.0497	5.79	1
11031	OCDF	39001-02-0	19.0	B	0.0444	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	82	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	82	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	87	17 - 157
13C12-2378-TCDF	81	24 - 169
13C12-12378-PeCDF	105	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	57	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	67	17 - 157
13C12-1278-TCDD (CRS)	94	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173197
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP10 SDG#: DX034-01FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP10-SA5B-QC-122210 Soil
SSFL Area IV Collocated Soil Sampling
DUP10-SA5B-QC-122210

LLI Sample # SW 6173197
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:05

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP10 SDG#: DX034-01FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 06:13	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB08-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173198
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DEB08 SDG#: DX034-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l	pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.134 JBQ	0.0904	2.13	1
10915	12378-PeCDD	40321-76-4	0.132 U	0.132	10.7	1
10915	123478-HxCDD	39227-28-6	0.104 U	0.104	10.7	1
10915	123678-HxCDD	57653-85-7	0.110 U	0.110	10.7	1
10915	123789-HxCDD	19408-74-3	0.108 U	0.108	10.7	1
10915	1234678-HpCDD	35822-46-9	0.915 JB	0.158	10.7	1
10915	OCDD	3268-87-9	2.88 JBQ	0.291	21.3	1
10915	2378-TCDF	51207-31-9	0.122 JBQ	0.0724	2.13	1
10915	12378-PeCDF	57117-41-6	0.167 JBQ	0.0534	10.7	1
10915	23478-PeCDF	57117-31-4	0.512 JBQ	0.0479	10.7	1
10915	123478-HxCDF	70648-26-9	0.253 JBQ	0.0735	10.7	1
10915	123678-HxCDF	57117-44-9	0.201 JBQ	0.0711	10.7	1
10915	123789-HxCDF	72918-21-9	0.0884 U	0.0884	10.7	1
10915	234678-HxCDF	60851-34-5	0.242 JBQ	0.0701	10.7	1
10915	1234678-HpCDF	67562-39-4	0.921 JB	0.0946	10.7	1
10915	1234789-HpCDF	55673-89-7	0.383 JB	0.139	10.7	1
10915	OCDF	39001-02-0	0.642 JBQ	0.257	21.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	59	25 - 181
13C12-123478-HxCDD	58	32 - 141
13C12-123678-HxCDD	57	28 - 130
13C12-123789-HxCDD	57	28 - 130
13C12-1234678-HpCDD	48	23 - 140
13C12-OCDD	35	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	60	24 - 185
13C12-23478-PeCDF	62	21 - 178
13C12-123478-HxCDF	58	26 - 152
13C12-123678-HxCDF	58	26 - 123
13C12-234678-HxCDF	58	28 - 136
13C12-123789-HxCDF	54	29 - 147
13C12-1234678-HpCDF	50	28 - 143
13C12-1234789-HpCDF	42	26 - 138
13C12-OCDF	28	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **EB08-SA5B-122210 Water**
SSFL Area IV Collocated Soil Sampling
EB08-SA5B-122210

LLI Sample # WW 6173198
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 11:45

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DEB08 SDG#: DX034-02EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018001	01/20/2011 23:57	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	2	11018001	01/18/2011 05:45	Ginelle L Haines	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173199
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DFB06 SDG#: DX034-03FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l	pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.0883 U	0.0883	2.01	1
10915	12378-PeCDD	40321-76-4	0.172 JBQ	0.117	10.0	1
10915	123478-HxCDD	39227-28-6	0.0868 U	0.0868	10.0	1
10915	123678-HxCDD	57653-85-7	0.0899 U	0.0899	10.0	1
10915	123789-HxCDD	19408-74-3	0.114 JB	0.0880	10.0	1
10915	1234678-HpCDD	35822-46-9	0.685 JB	0.134	10.0	1
10915	OCDD	3268-87-9	1.83 JBQ	0.331	20.1	1
10915	2378-TCDF	51207-31-9	0.0588 U	0.0588	2.01	1
10915	12378-PeCDF	57117-41-6	0.0462 JBQ	0.0461	10.0	1
10915	23478-PeCDF	57117-31-4	0.407 JBQ	0.0439	10.0	1
10915	123478-HxCDF	70648-26-9	0.212 JBQ	0.0549	10.0	1
10915	123678-HxCDF	57117-44-9	0.115 JBQ	0.0514	10.0	1
10915	123789-HxCDF	72918-21-9	0.190 JBQ	0.0622	10.0	1
10915	234678-HxCDF	60851-34-5	0.213 JBQ	0.0527	10.0	1
10915	1234678-HpCDF	67562-39-4	0.778 JB	0.0623	10.0	1
10915	1234789-HpCDF	55673-89-7	0.127 JBQ	0.0833	10.0	1
10915	OCDF	39001-02-0	0.765 JBQ	0.198	20.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	59	23 - 140
13C12-OCDD	44	17 - 157
13C12-2378-TCDF	72	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	61	28 - 143
13C12-1234789-HpCDF	54	26 - 138
13C12-OCDF	37	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: FB06-SA5B-122210 Water
SSFL Area IV Collocated Soil Sampling
FB06-SA5B-122210

LLI Sample # WW 6173199
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 13:30

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DFB06 SDG#: DX034-03FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018001	01/21/2011 00:54	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	2	11018001	01/18/2011 05:45	Ginelle L Haines	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-010-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173200
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD10 SDG#: DX034-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	18.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-010-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173200
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD10 SDG#: DX034-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0453	J	0.0269	1.22	1
11031	12378-PeCDD	40321-76-4	0.220	JQ	0.0364	6.11	1
11031	123478-HxCDD	39227-28-6	0.127	JBQ	0.0512	6.11	1
11031	123678-HxCDD	57653-85-7	0.467	J	0.0525	6.11	1
11031	123789-HxCDD	19408-74-3	0.368	J	0.0502	6.11	1
11031	1234678-HpCDD	35822-46-9	7.16	B	0.0579	6.11	1
11031	OCDD	3268-87-9	58.4	B	0.0484	12.2	1
11031	2378-TCDF	51207-31-9	0.0486	U	0.0486	1.22	1
11031	12378-PeCDF	57117-41-6	0.169	JBQ	0.0155	6.11	1
11031	23478-PeCDF	57117-31-4	0.397	JB	0.0197	6.11	1
11031	123478-HxCDF	70648-26-9	0.287	JBQ	0.0288	6.11	1
11031	123678-HxCDF	57117-44-9	0.179	JBQ	0.0228	6.11	1
11031	123789-HxCDF	72918-21-9	0.0739	JBQ	0.0254	6.11	1
11031	234678-HxCDF	60851-34-5	0.220	JB	0.0237	6.11	1
11031	1234678-HpCDF	67562-39-4	1.09	JB	0.0226	6.11	1
11031	1234789-HpCDF	55673-89-7	0.0939	JBQ	0.0291	6.11	1
11031	OCDF	39001-02-0	2.13	JB	0.0333	12.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	83	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	85	17 - 157
13C12-2378-TCDF	81	24 - 169
13C12-12378-PeCDF	96	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	82	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	74	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	72	17 - 157
13C12-1278-TCDD (CRS)	91	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-010-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173200
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD10 SDG#: DX034-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-010-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-010-SIV-SD-0.0-0.5

LLI Sample # SW 6173200
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:10

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DSD10 SDG#: DX034-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 07:09	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173201
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL101 SDG#: DX034-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	15.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173201
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL101 SDG#: DX034-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**		**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0241	U	0.0241	1.18	1
11031	12378-PeCDD	40321-76-4	0.0462	JQ	0.0340	5.89	1
11031	123478-HxCDD	39227-28-6	0.0285	U	0.0285	5.89	1
11031	123678-HxCDD	57653-85-7	0.214	J	0.0291	5.89	1
11031	123789-HxCDD	19408-74-3	0.323	J	0.0290	5.89	1
11031	1234678-HpCDD	35822-46-9	0.567	JB	0.0405	5.89	1
11031	OCDD	3268-87-9	3.59	JB	0.0578	11.8	1
11031	2378-TCDF	51207-31-9	0.0185	U	0.0185	1.18	1
11031	12378-PeCDF	57117-41-6	0.0545	JBQ	0.00789	5.89	1
11031	23478-PeCDF	57117-31-4	0.0452	JB	0.00872	5.89	1
11031	123478-HxCDF	70648-26-9	0.0292	JBQ	0.0220	5.89	1
11031	123678-HxCDF	57117-44-9	0.0320	JBQ	0.0155	5.89	1
11031	123789-HxCDF	72918-21-9	0.303	JB	0.0174	5.89	1
11031	234678-HxCDF	60851-34-5	0.0148	U	0.0148	5.89	1
11031	1234678-HpCDF	67562-39-4	0.0516	JB	0.0196	5.89	1
11031	1234789-HpCDF	55673-89-7	0.0250	U	0.0250	5.89	1
11031	OCDF	39001-02-0	0.246	JBQ	0.0490	11.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	76	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	48	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	60	29 - 147
13C12-1234678-HpCDF	59	28 - 143
13C12-1234789-HpCDF	55	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173201
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL101 SDG#: DX034-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-101-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-101-SA5B-SS-0.0-0.5

LLI Sample # SW 6173201
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:00

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL101 SDG#: DX034-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 08:06	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173202
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL117 SDG#: DX034-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	19.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173202
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL117 SDG#: DX034-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0344 JQ	0.0227	1.24	1
11031	12378-PeCDD	40321-76-4	0.0485 JQ	0.0284	6.20	1
11031	123478-HxCDD	39227-28-6	0.0337 JBQ	0.0246	6.20	1
11031	123678-HxCDD	57653-85-7	0.0782 JQ	0.0264	6.20	1
11031	123789-HxCDD	19408-74-3	0.0933 JQ	0.0258	6.20	1
11031	1234678-HpCDD	35822-46-9	2.26 JB	0.0602	6.20	1
11031	OCDD	3268-87-9	33.7 B	0.0533	12.4	1
11031	2378-TCDF	51207-31-9	0.0273 U	0.0273	1.24	1
11031	12378-PeCDF	57117-41-6	0.0459 JB	0.0104	6.20	1
11031	23478-PeCDF	57117-31-4	0.0663 JBQ	0.0112	6.20	1
11031	123478-HxCDF	70648-26-9	0.0334 JBQ	0.0195	6.20	1
11031	123678-HxCDF	57117-44-9	0.0318 JBQ	0.0159	6.20	1
11031	123789-HxCDF	72918-21-9	0.0327 JB	0.0175	6.20	1
11031	234678-HxCDF	60851-34-5	0.0298 JBQ	0.0136	6.20	1
11031	1234678-HpCDF	67562-39-4	0.346 JB	0.0230	6.20	1
11031	1234789-HpCDF	55673-89-7	0.0324 JB	0.0305	6.20	1
11031	OCDF	39001-02-0	1.04 JBQ	0.0442	12.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	75	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	80	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	76	23 - 140
13C12-OCDD	77	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	59	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	72	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	65	17 - 157
13C12-1278-TCDD (CRS)	84	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-117-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173202
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL117 SDG#: DX034-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-117-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-117-SA5B-SS-0.0-0.5

LLI Sample # SW 6173202
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:25

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL117 SDG#: DX034-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 09:02	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173203
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL118 SDG#: DX034-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	15.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173203
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL118 SDG#: DX034-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0268	U	0.0268	1.18	1
11031	12378-PeCDD	40321-76-4	0.0471	JQ	0.0309	5.90	1
11031	123478-HxCDD	39227-28-6	0.124	JB	0.0488	5.90	1
11031	123678-HxCDD	57653-85-7	0.390	JQ	0.0482	5.90	1
11031	123789-HxCDD	19408-74-3	0.318	J	0.0467	5.90	1
11031	1234678-HpCDD	35822-46-9	9.38	B	0.0594	5.90	1
11031	OCDD	3268-87-9	118	B	0.0690	11.8	1
11031	2378-TCDF	51207-31-9	0.0377	JBQ	0.0367	1.18	1
11031	12378-PeCDF	57117-41-6	0.104	JB	0.0178	5.90	1
11031	23478-PeCDF	57117-31-4	0.287	JBQ	0.0170	5.90	1
11031	123478-HxCDF	70648-26-9	0.134	JB	0.0382	5.90	1
11031	123678-HxCDF	57117-44-9	0.127	JBQ	0.0301	5.90	1
11031	123789-HxCDF	72918-21-9	0.200	JBQ	0.0297	5.90	1
11031	234678-HxCDF	60851-34-5	0.0877	JBQ	0.0282	5.90	1
11031	1234678-HpCDF	67562-39-4	1.29	JB	0.0290	5.90	1
11031	1234789-HpCDF	55673-89-7	0.157	JBQ	0.0320	5.90	1
11031	OCDF	39001-02-0	4.02	JB	0.0435	11.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	73	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	74	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	55	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	62	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	70	17 - 157
13C12-1278-TCDD (CRS)	82	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-118-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173203
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL118 SDG#: DX034-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-118-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-118-SA5B-SS-0.0-0.5

LLI Sample # SW 6173203
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:10

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL118 SDG#: DX034-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 09:59	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173204
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL100 SDG#: DX034-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	13.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173204
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL100 SDG#: DX034-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0276	U	0.0276	1.16	1
11031	12378-PeCDD	40321-76-4	0.147	JQ	0.0597	5.81	1
11031	123478-HxCDD	39227-28-6	0.336	JB	0.0827	5.81	1
11031	123678-HxCDD	57653-85-7	1.72	J	0.0849	5.81	1
11031	123789-HxCDD	19408-74-3	0.723	J	0.0810	5.81	1
11031	1234678-HpCDD	35822-46-9	53.1	B	0.102	5.81	1
11031	OCDD	3268-87-9	707	B	0.0952	11.6	1
11031	2378-TCDF	51207-31-9	0.0431	U	0.0431	1.16	1
11031	12378-PeCDF	57117-41-6	0.160	JBQ	0.0142	5.81	1
11031	23478-PeCDF	57117-31-4	0.208	JB	0.0160	5.81	1
11031	123478-HxCDF	70648-26-9	0.324	JB	0.0364	5.81	1
11031	123678-HxCDF	57117-44-9	0.215	JBQ	0.0298	5.81	1
11031	123789-HxCDF	72918-21-9	0.135	JBQ	0.0358	5.81	1
11031	234678-HxCDF	60851-34-5	0.335	JB	0.0321	5.81	1
11031	1234678-HpCDF	67562-39-4	4.69	JB	0.0357	5.81	1
11031	1234789-HpCDF	55673-89-7	0.499	JB	0.0487	5.81	1
11031	OCDF	39001-02-0	11.8	B	0.0373	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	74	25 - 164
13C12-12378-PeCDD	76	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	83	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	83	23 - 140
13C12-OCDD	86	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	85	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	75	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	79	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173204
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL100 SDG#: DX034-08BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173204
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL100 SDG#: DX034-08BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 10:56	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173205
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL100 SDG#: DX034-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	13.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173205
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL100 SDG#: DX034-08MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	22.4		0.0365	1.16	1
11031	12378-PeCDD	40321-76-4	119		0.0878	5.81	1
11031	123478-HxCDD	39227-28-6	112	B	0.0827	5.81	1
11031	123678-HxCDD	57653-85-7	117		0.0890	5.81	1
11031	123789-HxCDD	19408-74-3	115		0.0884	5.81	1
11031	1234678-HpCDD	35822-46-9	173	B	0.110	5.81	1
11031	OCDD	3268-87-9	862	B	0.0952	11.6	1
11031	2378-TCDF	51207-31-9	22.9	B	0.0602	1.16	1
11031	12378-PeCDF	57117-41-6	110	B	0.0235	5.81	1
11031	23478-PeCDF	57117-31-4	110	B	0.0253	5.81	1
11031	123478-HxCDF	70648-26-9	115	B	0.0656	5.81	1
11031	123678-HxCDF	57117-44-9	112	B	0.0535	5.81	1
11031	123789-HxCDF	72918-21-9	114	B	0.0566	5.81	1
11031	234678-HxCDF	60851-34-5	117	B	0.0525	5.81	1
11031	1234678-HpCDF	67562-39-4	120	B	0.0628	5.81	1
11031	1234789-HpCDF	55673-89-7	117	B	0.0779	5.81	1
11031	OCDF	39001-02-0	243	B	0.0746	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	81	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	80	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	79	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	70	26 - 138
13C12-OCDF	71	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-100-SA5B-SS-0.0-0.5MS Soil**
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173205
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL100 SDG#: DX034-08MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173205
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL100 SDG#: DX034-08MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 11:52	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173206
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL100 SDG#: DX034-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	13.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173206
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL100 SDG#: DX034-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	23.3		0.0437	1.16	1
11031	12378-PeCDD	40321-76-4	116		0.0879	5.81	1
11031	123478-HxCDD	39227-28-6	114	B	0.119	5.81	1
11031	123678-HxCDD	57653-85-7	116		0.122	5.81	1
11031	123789-HxCDD	19408-74-3	113		0.121	5.81	1
11031	1234678-HpCDD	35822-46-9	169	B	0.140	5.81	1
11031	OCDD	3268-87-9	806	B	0.119	11.6	1
11031	2378-TCDF	51207-31-9	23.4	B	0.0628	1.16	1
11031	12378-PeCDF	57117-41-6	109	B	0.0286	5.81	1
11031	23478-PeCDF	57117-31-4	110	B	0.0300	5.81	1
11031	123478-HxCDF	70648-26-9	116	B	0.0884	5.81	1
11031	123678-HxCDF	57117-44-9	114	B	0.0721	5.81	1
11031	123789-HxCDF	72918-21-9	115	B	0.0826	5.81	1
11031	234678-HxCDF	60851-34-5	113	B	0.0692	5.81	1
11031	1234678-HpCDF	67562-39-4	120	B	0.0639	5.81	1
11031	1234789-HpCDF	55673-89-7	117	B	0.0760	5.81	1
11031	OCDF	39001-02-0	243	B	0.0672	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	90	25 - 164
13C12-12378-PeCDD	82	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	91	28 - 130
13C12-123789-HxCDD	91	28 - 130
13C12-1234678-HpCDD	84	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	92	24 - 169
13C12-12378-PeCDF	91	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	88	26 - 123
13C12-234678-HxCDF	87	28 - 136
13C12-123789-HxCDF	80	29 - 147
13C12-1234678-HpCDF	76	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	99	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173206
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL100 SDG#: DX034-08MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-100-SA5B-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-100-SA5B-SS-0.0-0.5

LLI Sample # SW 6173206
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:02

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL100 SDG#: DX034-08MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 12:49	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173207
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL114 SDG#: DX034-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	19.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173207
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL114 SDG#: DX034-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0498	JQ	0.0228	1.25	1
11031	12378-PeCDD	40321-76-4	0.253	J	0.0355	6.23	1
11031	123478-HxCDD	39227-28-6	0.285	JBQ	0.0636	6.23	1
11031	123678-HxCDD	57653-85-7	0.969	J	0.0651	6.23	1
11031	123789-HxCDD	19408-74-3	0.758	J	0.0651	6.23	1
11031	1234678-HpCDD	35822-46-9	30.3	B	0.0914	6.23	1
11031	OCDD	3268-87-9	423	B	0.0777	12.5	1
11031	2378-TCDF	51207-31-9	0.0312	JBQ	0.0307	1.25	1
11031	12378-PeCDF	57117-41-6	0.183	JB	0.0142	6.23	1
11031	23478-PeCDF	57117-31-4	0.148	JBQ	0.0151	6.23	1
11031	123478-HxCDF	70648-26-9	0.331	JB	0.0352	6.23	1
11031	123678-HxCDF	57117-44-9	0.295	JB	0.0315	6.23	1
11031	123789-HxCDF	72918-21-9	0.224	JBQ	0.0300	6.23	1
11031	234678-HxCDF	60851-34-5	0.249	JB	0.0294	6.23	1
11031	1234678-HpCDF	67562-39-4	3.19	JB	0.0362	6.23	1
11031	1234789-HpCDF	55673-89-7	0.372	JBQ	0.0471	6.23	1
11031	OCDF	39001-02-0	10.4	JB	0.0369	12.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	85	25 - 164
13C12-12378-PeCDD	78	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	84	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	92	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	76	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	88	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	75	26 - 138
13C12-OCDF	86	17 - 157
13C12-1278-TCDD (CRS)	91	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-114-SA5B-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173207
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL114 SDG#: DX034-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-114-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-114-SA5B-SS-0.0-0.5

LLI Sample # SW 6173207
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:22

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL114 SDG#: DX034-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 16:48	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173208
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL102 SDG#: DX034-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173208
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL102 SDG#: DX034-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0226	U	0.0226	1.13	1
11031	12378-PeCDD	40321-76-4	0.140	J	0.0379	5.65	1
11031	123478-HxCDD	39227-28-6	0.274	JBQ	0.0592	5.65	1
11031	123678-HxCDD	57653-85-7	0.993	J	0.0583	5.65	1
11031	123789-HxCDD	19408-74-3	0.633	J	0.0525	5.65	1
11031	1234678-HpCDD	35822-46-9	31.0	B	0.0832	5.65	1
11031	OCDD	3268-87-9	477	B	0.0794	11.3	1
11031	2378-TCDF	51207-31-9	0.0606	JBQ	0.0428	1.13	1
11031	12378-PeCDF	57117-41-6	0.124	JBQ	0.0154	5.65	1
11031	23478-PeCDF	57117-31-4	0.122	JBQ	0.0176	5.65	1
11031	123478-HxCDF	70648-26-9	0.321	JBQ	0.0461	5.65	1
11031	123678-HxCDF	57117-44-9	0.270	JBQ	0.0338	5.65	1
11031	123789-HxCDF	72918-21-9	0.154	JB	0.0304	5.65	1
11031	234678-HxCDF	60851-34-5	0.267	JB	0.0278	5.65	1
11031	1234678-HpCDF	67562-39-4	4.65	JB	0.0458	5.65	1
11031	1234789-HpCDF	55673-89-7	0.487	JB	0.0423	5.65	1
11031	OCDF	39001-02-0	15.7	B	0.0354	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	79	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	76	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	82	24 - 169
13C12-12378-PeCDF	89	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	48	26 - 152
13C12-123678-HxCDF	66	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	57	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	75	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173208
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL102 SDG#: DX034-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-102-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-102-SA5B-SS-0.0-0.5

LLI Sample # SW 6173208
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 09:36

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL102 SDG#: DX034-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 17:45	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173209
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL024 SDG#: DX034-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	20.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173209
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL024 SDG#: DX034-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0193	U	0.0193	1.25	1
11031	12378-PeCDD	40321-76-4	0.104	J	0.0262	6.27	1
11031	123478-HxCDD	39227-28-6	0.156	JB	0.0466	6.27	1
11031	123678-HxCDD	57653-85-7	0.372	J	0.0464	6.27	1
11031	123789-HxCDD	19408-74-3	0.299	J	0.0445	6.27	1
11031	1234678-HpCDD	35822-46-9	8.82	B	0.0561	6.27	1
11031	OCDD	3268-87-9	80.2	B	0.0553	12.5	1
11031	2378-TCDF	51207-31-9	0.0363	JBQ	0.0330	1.25	1
11031	12378-PeCDF	57117-41-6	0.122	JBQ	0.0123	6.27	1
11031	23478-PeCDF	57117-31-4	0.109	JBQ	0.0135	6.27	1
11031	123478-HxCDF	70648-26-9	0.202	JB	0.0356	6.27	1
11031	123678-HxCDF	57117-44-9	0.154	JB	0.0257	6.27	1
11031	123789-HxCDF	72918-21-9	0.227	JB	0.0276	6.27	1
11031	234678-HxCDF	60851-34-5	0.228	JB	0.0228	6.27	1
11031	1234678-HpCDF	67562-39-4	0.949	JB	0.0273	6.27	1
11031	1234789-HpCDF	55673-89-7	0.228	JB	0.0357	6.27	1
11031	OCDF	39001-02-0	2.68	JB	0.0425	12.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	85	25 - 164
13C12-12378-PeCDD	74	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	83	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	78	24 - 169
13C12-12378-PeCDF	86	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	50	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	69	29 - 147
13C12-1234678-HpCDF	65	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	85	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173209
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL024 SDG#: DX034-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-024-SA5B-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-024-SA5B-SS-0.0-0.5

LLI Sample # SW 6173209
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:01

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL024 SDG#: DX034-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 18:41	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173210
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL157 SDG#: DX034-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173210
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL157 SDG#: DX034-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0180 U	0.0180	1.10	1
11031	12378-PeCDD	40321-76-4	0.0595 JQ	0.0232	5.49	1
11031	123478-HxCDD	39227-28-6	0.0315 JBQ	0.0279	5.49	1
11031	123678-HxCDD	57653-85-7	0.416 JQ	0.0261	5.49	1
11031	123789-HxCDD	19408-74-3	0.557 J	0.0233	5.49	1
11031	1234678-HpCDD	35822-46-9	1.24 JB	0.0349	5.49	1
11031	OCDD	3268-87-9	19.6 B	0.0430	11.0	1
11031	2378-TCDF	51207-31-9	0.0410 JBQ	0.0234	1.10	1
11031	12378-PeCDF	57117-41-6	0.108 JB	0.00823	5.49	1
11031	23478-PeCDF	57117-31-4	0.113 JB	0.0104	5.49	1
11031	123478-HxCDF	70648-26-9	0.0722 JBQ	0.0293	5.49	1
11031	123678-HxCDF	57117-44-9	0.0787 JBQ	0.0182	5.49	1
11031	123789-HxCDF	72918-21-9	0.324 JBQ	0.0172	5.49	1
11031	234678-HxCDF	60851-34-5	0.0783 JBQ	0.0156	5.49	1
11031	1234678-HpCDF	67562-39-4	0.213 JB	0.0184	5.49	1
11031	1234789-HpCDF	55673-89-7	0.0557 JB	0.0231	5.49	1
11031	OCDF	39001-02-0	0.566 JBQ	0.0403	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	86	25 - 164
13C12-12378-PeCDD	77	25 - 181
13C12-123478-HxCDD	72	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	86	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	97	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	41	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	60	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	90	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-157-SA5B-SB-4.0-5.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173210
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL157 SDG#: DX034-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-157-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-4.0-5.0

LLI Sample # SW 6173210
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:48

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DL157 SDG#: DX034-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 19:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173211
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1584 SDG#: DX034-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	9.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173211
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1584 SDG#: DX034-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0192	U	0.0192	1.11	1
11031	12378-PeCDD	40321-76-4	0.0711	J	0.0254	5.54	1
11031	123478-HxCDD	39227-28-6	0.0288	U	0.0288	5.54	1
11031	123678-HxCDD	57653-85-7	0.380	J	0.0293	5.54	1
11031	123789-HxCDD	19408-74-3	0.742	J	0.0271	5.54	1
11031	1234678-HpCDD	35822-46-9	0.636	JBQ	0.0316	5.54	1
11031	OCDD	3268-87-9	9.91	JB	0.0299	11.1	1
11031	2378-TCDF	51207-31-9	0.0213	U	0.0213	1.11	1
11031	12378-PeCDF	57117-41-6	0.0608	JBQ	0.0103	5.54	1
11031	23478-PeCDF	57117-31-4	0.0667	JBQ	0.0114	5.54	1
11031	123478-HxCDF	70648-26-9	0.0499	JBQ	0.0186	5.54	1
11031	123678-HxCDF	57117-44-9	0.0743	JBQ	0.0145	5.54	1
11031	123789-HxCDF	72918-21-9	0.441	JB	0.0162	5.54	1
11031	234678-HxCDF	60851-34-5	0.0421	JB	0.0139	5.54	1
11031	1234678-HpCDF	67562-39-4	0.119	JBQ	0.0150	5.54	1
11031	1234789-HpCDF	55673-89-7	0.0346	JBQ	0.0178	5.54	1
11031	OCDF	39001-02-0	0.258	JB	0.0253	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	83	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	89	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	74	17 - 157
13C12-1278-TCDD (CRS)	86	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*

*=This limit was used in the evaluation of the final result

Sample Description: **SL-158-SA5B-SB-4.0-5.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173211
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1584 SDG#: DX034-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-158-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-158-SA5B-SB-4.0-5.0

LLI Sample # SW 6173211
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 12:09

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1584 SDG#: DX034-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 20:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173212
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1589 SDG#: DX034-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	10.3	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173212
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1589 SDG#: DX034-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0194 JQ	0.0171	1.11	1
11031	12378-PeCDD	40321-76-4	0.0256 JQ	0.0204	5.57	1
11031	123478-HxCDD	39227-28-6	0.0248 JBQ	0.0183	5.57	1
11031	123678-HxCDD	57653-85-7	0.0946 JQ	0.0184	5.57	1
11031	123789-HxCDD	19408-74-3	0.199 JQ	0.0179	5.57	1
11031	1234678-HpCDD	35822-46-9	0.294 JB	0.0279	5.57	1
11031	OCDD	3268-87-9	1.64 JB	0.0320	11.1	1
11031	2378-TCDF	51207-31-9	0.0128 U	0.0128	1.11	1
11031	12378-PeCDF	57117-41-6	0.0315 JBQ	0.00702	5.57	1
11031	23478-PeCDF	57117-31-4	0.0464 JBQ	0.00758	5.57	1
11031	123478-HxCDF	70648-26-9	0.0361 JB	0.0158	5.57	1
11031	123678-HxCDF	57117-44-9	0.0250 JBQ	0.0118	5.57	1
11031	123789-HxCDF	72918-21-9	0.169 JB	0.0129	5.57	1
11031	234678-HxCDF	60851-34-5	0.0117 JBQ	0.0111	5.57	1
11031	1234678-HpCDF	67562-39-4	0.0436 JB	0.0129	5.57	1
11031	1234789-HpCDF	55673-89-7	0.0415 JBQ	0.0172	5.57	1
11031	OCDF	39001-02-0	0.141 JB	0.0247	11.1	1

Labeled Compounds	**%Rec**	**Windows**
13C12-2378-TCDD	80	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	79	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	80	24 - 169
13C12-12378-PeCDF	81	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	57	26 - 152
13C12-123678-HxCDF	72	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	63	17 - 157
13C12-1278-TCDD (CRS)	91	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173212
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1589 SDG#: DX034-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-157-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-157-SA5B-SB-9.0-10.0

LLI Sample # SW 6173212
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 10:52

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1589 SDG#: DX034-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 21:31	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11007162401B	01/07/2011 20:10	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173213
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1454 SDG#: DX034-15*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	12.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173213
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1454 SDG#: DX034-15*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0161	U	0.0161	1.14	1
11031	12378-PeCDD	40321-76-4	0.0271	J	0.0260	5.72	1
11031	123478-HxCDD	39227-28-6	0.0196	U	0.0196	5.72	1
11031	123678-HxCDD	57653-85-7	0.126	JQ	0.0193	5.72	1
11031	123789-HxCDD	19408-74-3	0.182	JQ	0.0191	5.72	1
11031	1234678-HpCDD	35822-46-9	0.251	JB	0.0280	5.72	1
11031	OCDD	3268-87-9	1.37	JBQ	0.0307	11.4	1
11031	2378-TCDF	51207-31-9	0.0127	U	0.0127	1.14	1
11031	12378-PeCDF	57117-41-6	0.0333	JBQ	0.00709	5.72	1
11031	23478-PeCDF	57117-31-4	0.0551	JBQ	0.00847	5.72	1
11031	123478-HxCDF	70648-26-9	0.0352	JBQ	0.0192	5.72	1
11031	123678-HxCDF	57117-44-9	0.0161	JB	0.0124	5.72	1
11031	123789-HxCDF	72918-21-9	0.268	JB	0.0119	5.72	1
11031	234678-HxCDF	60851-34-5	0.0315	JB	0.0114	5.72	1
11031	1234678-HpCDF	67562-39-4	0.0803	JBQ	0.0168	5.72	1
11031	1234789-HpCDF	55673-89-7	0.0257	JBQ	0.0167	5.72	1
11031	OCDF	39001-02-0	0.134	JB	0.0244	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	77	23 - 140
13C12-OCDD	81	17 - 157
13C12-2378-TCDF	75	24 - 169
13C12-12378-PeCDF	87	24 - 185
13C12-23478-PeCDF	68	21 - 178
13C12-123478-HxCDF	44	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	57	28 - 143
13C12-1234789-HpCDF	69	26 - 138
13C12-OCDF	74	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-145-SA5B-SB-4.0-5.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173213
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1454 SDG#: DX034-15*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-145-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-145-SA5B-SB-4.0-5.0

LLI Sample # SW 6173213
LLI Group # 1226931
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 12/22/2010 14:54

Submitted: 12/23/2010 11:20
Reported: 02/10/2011 17:15

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1454 SDG#: DX034-15*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11018002	01/30/2011 22:28	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11018002	01/18/2011 12:20	Ginelle L Haines	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11014162401A	01/14/2011 19:21	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226931
Reported: 02/10/11 at 05:15 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11007162401B	Sample number(s): 6173197,6173200-6173201,6173204-6173206,6173208-6173212								
28a Moisture Content by 160.3					100		80-120		
Batch number: 11014162401A	Sample number(s): 6173202-6173203,6173207,6173213								
28a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11018001	Sample number(s): 6173198-6173199								
2378-TCDD	0.196 J	0.0833	2.00	pg/l	85		67-158		
12378-PeCDD	0.436 J	0.126	10.0	pg/l	89		70-142		
123478-HxCDD	0.582 J	0.115	10.0	pg/l	93		70-164		
123678-HxCDD	0.636 J	0.118	10.0	pg/l	91		76-134		
123789-HxCDD	0.695 J	0.115	10.0	pg/l	93		64-162		
1234678-HpCDD	2.11 J	0.199	10.0	pg/l	97		70-140		
OCDD	7.03 J	0.430	20.0	pg/l	108		78-144		
2378-TCDF	0.133 J	0.0727	2.00	pg/l	86		75-158		
12378-PeCDF	0.316 J	0.0483	10.0	pg/l	90		80-134		
23478-PeCDF	0.610 J	0.0452	10.0	pg/l	88		68-160		
123478-HxCDF	0.509 J	0.0809	10.0	pg/l	91		72-134		
123678-HxCDF	0.532 J	0.0749	10.0	pg/l	89		84-130		
123789-HxCDF	0.680 J	0.0917	10.0	pg/l	88		78-130		
234678-HxCDF	0.551 J	0.0781	10.0	pg/l	89		70-156		
1234678-HpCDF	1.21 J	0.0929	10.0	pg/l	96		82-122		
1234789-HpCDF	0.676 J	0.129	10.0	pg/l	95		78-138		
OCDF	3.35 J	0.351	20.0	pg/l	106		63-170		
Batch number: 11018002	Sample number(s): 6173197,6173200-6173213								
2378-TCDD	0.0201 U	0.0201	1.00	ng/kg	98		67-158		
12378-PeCDD	0.0240 U	0.0240	5.00	ng/kg	100		70-142		
123478-HxCDD	0.0290 J	0.0244	5.00	ng/kg	99		70-164		
123678-HxCDD	0.0249 U	0.0249	5.00	ng/kg	99		76-134		
123789-HxCDD	0.0239 U	0.0239	5.00	ng/kg	99		64-162		
1234678-HpCDD	0.244 J	0.0439	5.00	ng/kg	98		70-140		
OCDD	0.827 J	0.0486	10.0	ng/kg	101		78-144		
2378-TCDF	0.0195 J	0.0156	1.00	ng/kg	102		75-158		
12378-PeCDF	0.0353 J	0.00680	5.00	ng/kg	96		80-134		
23478-PeCDF	0.0543 J	0.00880	5.00	ng/kg	95		68-160		
123478-HxCDF	0.0386 J	0.0146	5.00	ng/kg	99		72-134		
123678-HxCDF	0.0440 J	0.0119	5.00	ng/kg	98		84-130		
123789-HxCDF	0.0458 J	0.0145	5.00	ng/kg	98		78-130		
234678-HxCDF	0.0450 J	0.0125	5.00	ng/kg	99		70-156		
1234678-HpCDF	0.0317 J	0.0202	5.00	ng/kg	97		82-122		
1234789-HpCDF	0.0484 J	0.0319	5.00	ng/kg	101		78-138		
OCDF	0.165 J	0.0371	10.0	ng/kg	100		63-170		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226931
Reported: 02/10/11 at 05:15 PM

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11007162401B	Sample number(s): 6173197,6173200-6173201,6173204-6173206,6173208-6173212 BKG: P173167								
28a Moisture Content by 160.3						13.9	12.7	8	20
Batch number: 11014162401A	Sample number(s): 6173202-6173203,6173207,6173213 BKG: P182836								
28a Moisture Content by 160.3						12.3	13.1	6	20
Batch number: 11018002	Sample number(s): 6173197,6173200-6173213 UNSPK: 6173204								
2378-TCDD	96	100	67-158	4	25				
12378-PeCDD	102	100	70-142	2	25				
123478-HxCDD	96	98	70-164	1	25				
123678-HxCDD	99	98	76-134	1	25				
123789-HxCDD	98	96	64-162	2	25				
1234678-HpCDD	103	100	70-140	2	25				
OCDD	67*	43*	78-144	7	25				
2378-TCDF	98	101	75-158	2	25				
12378-PeCDF	95	94	80-134	1	25				
23478-PeCDF	94	95	68-160	1	25				
123478-HxCDF	99	100	72-134	1	25				
123678-HxCDF	96	98	84-130	2	25				
123789-HxCDF	98	99	78-130	1	25				
234678-HxCDF	101	97	70-156	3	25				
1234678-HpCDF	99	100	82-122	1	25				
1234789-HpCDF	100	100	78-138	0	25				
OCDF	100	99	63-170	0	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B
Batch number: 11018001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6173198	60	62	58	58	58	54
6173199	68	71	68	69	69	66
Blank	89	94	89	90	90	86
OPR	69	76	76	75	75	70
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226931
Reported: 02/10/11 at 05:15 PM

Surrogate Quality Control

6173198	50	42	28	81	59	58
6173199	61	54	37	79	69	72
Blank	71	62	37	96	88	89
OPR	59	50	28	82	73	73
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6173198	57	57	48	35	66	60
6173199	70	70	59	44	72	71
Blank	86	86	66	41	95	93
OPR	72	71	53	30	75	73
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11018002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6173197	82	82	57	81	77	72
6173200	83	75	65	82	75	77
6173201	70	66	48	66	66	60
6173202	75	70	59	73	78	72
6173203	74	71	55	68	71	73
6173204	74	75	70	85	77	75
6173205	79	75	65	79	76	79
6173206	90	82	72	88	87	80
6173207	85	76	70	80	80	88
6173208	79	73	48	66	75	78
6173209	85	73	50	69	75	69
6173210	86	72	41	64	75	71
6173211	83	70	56	73	73	71
6173212	80	70	57	72	73	70
6173213	76	68	44	67	70	74
Blank	77	74	70	89	78	74
MS	79	75	65	79	76	79
MSD	90	82	72	88	87	80
OPR	73	72	68	80	78	79
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6173197	73	67	67	94	83	80
6173200	74	67	72	91	77	81
6173201	59	55	53	81	64	69
6173202	70	63	65	84	72	80
6173203	62	68	70	82	69	72
6173204	81	73	79	87	76	83
6173205	73	70	71	86	72	81
6173206	76	76	75	99	82	90
6173207	81	75	86	91	78	83
6173208	57	73	75	85	72	73
6173209	65	61	58	85	74	76

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1226931
Reported: 02/10/11 at 05:15 PM

Surrogate Quality Control

6173210	60	57	55	90	77	72
6173211	72	73	74	86	72	78
6173212	70	64	63	91	70	76
6173213	57	69	74	81	69	70
Blank	87	66	67	90	78	84
MS	73	70	71	86	72	81
MSD	76	76	75	99	82	90
OPR	80	69	68	88	72	82
Limits:	28-143	26-138	17-157	35-197	25-181	32-141

	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6173197	83	82	84	87	81	105
6173200	79	81	81	85	81	96
6173201	70	71	70	64	70	76
6173202	79	79	76	77	76	79
6173203	74	75	73	73	76	74
6173204	83	80	83	86	78	89
6173205	79	79	80	81	79	85
6173206	91	91	84	80	92	91
6173207	84	84	82	92	82	87
6173208	76	79	79	83	82	89
6173209	81	83	81	80	78	86
6173210	80	86	79	79	80	97
6173211	78	81	89	89	76	81
6173212	79	80	81	79	80	81
6173213	74	75	77	81	75	87
Blank	86	86	83	89	75	95
MS	79	79	80	81	79	85
MSD	91	91	84	80	92	91
OPR	82	83	78	76	72	82
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1226931 6173197-213

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers: (Signature) [signature] Date/Time 12/22/10 1630

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	SVOCs EPA 8270C & PAHs 8270 SIM	TPH-DRO EPA 8015B	**TPH-ERH EPA 8015B Mod.	*Metals EPA 6010/6020B&7471A	*Hex Chrome EPA 7199@	*Fluoride EPA 300.0	*PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	Perchlorate Confirmation by EPA 6850	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**pH EPA 9045C	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
DUP10-SA5B-QC-122210	12.22.10	0905	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X									SURFACE DUP
EB08-SA5B-122210	12.22.10	1145	water	none	6-1 liter ambers			X						X	X			X	X										surface tool rinsate
EB08-SA5B-122210	12.22.10	1145	water	none	1-500 ml poly							X	X			X													surface tool rinsate
EB08-SA5B-122210	12.22.10	1145	water	HNO3	1-500 ml poly						X																		surface tool rinsate
FB06-SA5B-~~122110~~ 122210	12.22.10	1330	water	HCl	6-40 mL VOA vials	X	X																						
FB06-SA5B-~~122110~~	12.22.10	1330	water	none	6-1 liter ambers			X						X	X			X	X										surface tool rinsate
FB06-SA5B-~~122110~~	12.22.10	1330	water	none	1-500 ml poly							X	X			X													surface tool rinsate
FB06-SA5B-~~122110~~	12.22.10	1330	water	HNO3	1-500 ml poly						X																		surface tool rinsate
FB06-SA5B-~~122110~~	12.22.10	1330	water	HCl	5-40-mL VOA vials				X																			X	surface tool rinsate
FB06-SA5B-~~122110~~	12.22.10	1330	water	none	4-40 mL VOA vials															X							X		surface tool rinsate
FB06-SA5B-~~122110~~	12.22.10	1330	water	none	4-1L ambers					X												X	X			X			surface tool rinsate
FB06-SA5B-~~122110~~	12.22.10	1330	water	none	1-250 mL glass bottle																X								surface tool rinsate
FB06-SA5B-~~122110~~ ✓	12.22.10	1330	water	NaOH	1-500 mL poly																				X				surface tool rinsate
SED-010-SIV-SD-0.0-0.5	12.22.10	1010	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-101-SA5B-SS-0.0-0.5	12.22.10	0900	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X	X	X	X										
SL-117-SA5B-SS-0.0-0.5	12.22.10	0925	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-117-SA5B-SS-0.0-0.5	12.22.10	0925	soil	none	1 x 16 oz. Jar					X										X	X	X	X	X	X	X	X	X	
SL-117-SA5B-SS-0.0-0.5	12.22.10	0910	soil	none	5 Encore Samplers	X	X		X																				
SL-118-SA5B-SS-0.0-0.5	12.22.10	0910	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-118-SA5B-SS-0.0-0.5	12.22.10	0910	soil	none	1 x 16 oz. Jar					X										X	X	X	X	X	X	X	X	X	
SL-118-SA5B-SS-0.0-0.5	12.22.10	0910	soil	none	5 Encore Samplers	X	X		X																				
SL-100-SA5B-SS-0.0-0.5MS	12.22.10	0902	soil	none	2 16 oz. Jars & 2 6" sleeves			X			X	X	X	X	X	X		X	X										surface MS/MSD
SL-114-SA5B-SS-0.0-0.5	12.22.10	0922	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-114-SA5B-SS-0.0-0.5	12.22.10	0922	soil	none	1 x 16 oz. Jar					X										X	X	X	X	X	X	X	X	X	
SL-114-SA5B-SS-0.0-0.5	12.22.10	0922	soil	none	5 Encore Samplers	X	X		X																				
SL-102-SA5B-SS-0.0-0.5	12.22.10	0936	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-024-SA5B-SS-0.0-0.5	12.22.10	1001	soil	none	1 x 16 oz. Jar & 1 6" sleeve			X			X	X	X	X	X	X		X	X										
SL-157-SA5B-SB-4.0-5.0	12.22.10	1048	soil	none	2 16 oz jars			X		X	X	X	X	X	X	X													
SL-157-SA5B-SB-4.5	12.22.10	1045	soil	none	4 Encore Samplers	X	X																						
SL-158-SA5B-SB-4.0-5.0	12.22.10	1209	soil	none	2 16 oz jars			X		X	X	X	X	X	X	X	X												
SL-158-SA5B-SB-4.5	12.22.10	1201	soil	none	4 Encore Samplers	X	X																						
SL-~~158~~-SA5B-SB-9.0-10.0	12.22.10	1052	soil	none	2 16 oz jars			X			X	X	X	X	X	X													
SL-145-SA5B-SB-4.0-5.0	12.22.10	1454	soil	none	4 16 oz jars			X		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-145-SA5B-SB-4.5	12.22.10	1450	soil	none	5 Encore Samplers	X	X		X																				
TB-122210	12.22.10	1300	water	HCl	4-40 mL clear VOA vials	X	X		X																				trip blank

SL-157

Relinquished by: (Signature) [signature] Date/Time 12.22.10 1630

Received for Laboratory by: (Signature) [signature] Date/Time 12/23/10 1610

Laboratory: Lancaster Laboratories, Inc.

Relinquished by: (Signature) Date/Time

Airbill No: Tracking Numbers 8695 1431 7947 8695 1431 7958, 8695 1431 9880, 8695 1431 9891, 8695 1432 3563

No. of coolers = 5

SL-158-SA5B-SB-9.0-10.0 was updated to SL-157-SA5B-SB-9.0-10.0 and the collection date in the FB ID was changed to 122210 per PB on 12/23/10.

NLM 12/29/10

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

February 08, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 01/14/2011
Group Number: 1229054
SDG: DE060
PO Number: 1203-004-007-AL
Release Number: Tracking #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-073-SA5B-SB-4.0-5.0 Soil	6183546
SL-301-SA5B-SB-4.0-5.0 Soil	6183547
SL-301-SA5B-SB-7.5-8.5 Soil	6183548
SL-074-SA5B-SB-4.0-5.0 Soil	6183549
SL-074-SA5B-SB-7.0-8.0 Soil	6183550
SL-121-SA5B-SB-4.0-5.0 Soil	6183551
SL-121-SA5B-SB-9.0-10.0 Soil	6183552
SL-120-SA5B-SB-3.0-4.0 Soil	6183553
SL-119-SA5B-SB-3.0-4.0 Soil	6183554
SED-009-SIV-SD-0.0-0.5 Sediment	6183555
SED-028-SIV-SD-0.0-0.5 Sediment	6183556
SL-122-SA5B-SB-2.0-3.0 Soil	6183557
EB20-SA5B-011311 Water	6183558
EB21-SA5B-011311 Water	6183559
TB-011311 Water	6183560

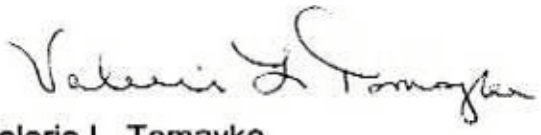
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	CDM Federal Services Program	Attn: Todd Burgesser
1 COPY TO	Data Package Group	

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Valerie L. Tomayko
Group Leader

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 12:31

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL073 SDG#: DE060-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
06192	Acetone	67-64-1	7.4	U	7.4	8.8	0.97
06192	Benzene	71-43-2	0.11	U	0.11	4.4	0.97
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.4	0.97
06192	Bromochloromethane	74-97-5	0.36	U	0.36	4.4	0.97
06192	Bromodichloromethane	75-27-4	0.09	U	0.09	4.4	0.97
06192	Bromoform	75-25-2	0.44	U	0.44	4.4	0.97
06192	Bromomethane	74-83-9	0.28	U	0.28	4.4	0.97
06192	2-Butanone	78-93-3	1.3	U	1.3	8.8	0.97
06192	n-Butylbenzene	104-51-8	0.13	U	0.13	4.4	0.97
06192	sec-Butylbenzene	135-98-8	0.07	U	0.07	4.4	0.97
06192	tert-Butylbenzene	98-06-6	0.18	U	0.18	4.4	0.97
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.4	0.97
06192	Chlorobenzene	108-90-7	0.12	U	0.12	4.4	0.97
06192	Chloroethane	75-00-3	0.14	U	0.14	4.4	0.97
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.33	U	0.33	4.4	0.97
06192	Chloroform	67-66-3	0.13	U	0.13	4.4	0.97
06192	Chloromethane	74-87-3	0.36	U	0.36	4.4	0.97
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.4	0.97
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.4	0.97
06192	Chlorotrifluoroethene	79-38-9	0.55	U	0.55	5.5	0.97
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.77	U	0.77	4.4	0.97
06192	Dibromochloromethane	124-48-1	0.22	U	0.22	4.4	0.97
06192	1,2-Dibromoethane	106-93-4	0.19	U	0.19	4.4	0.97
06192	Dibromomethane	74-95-3	0.27	U	0.27	4.4	0.97
06192	1,2-Dichlorobenzene	95-50-1	0.1	U	0.1	4.4	0.97
06192	1,3-Dichlorobenzene	541-73-1	0.13	U	0.13	4.4	0.97
06192	1,4-Dichlorobenzene	106-46-7	0.18	U	0.18	4.4	0.97
06192	Dichlorodifluoromethane	75-71-8	0.13	U	0.13	4.4	0.97
06192	1,1-Dichloroethane	75-34-3	0.11	U	0.11	4.4	0.97
06192	1,2-Dichloroethane	107-06-2	0.17	U	0.17	4.4	0.97
06192	1,1-Dichloroethene	75-35-4	0.43	U	0.43	4.4	0.97
06192	cis-1,2-Dichloroethene	156-59-2	0.21	U	0.21	4.4	0.97
06192	trans-1,2-Dichloroethene	156-60-5	0.13	U	0.13	4.4	0.97
06192	1,2-Dichloropropane	78-87-5	0.19	U	0.19	4.4	0.97
06192	1,3-Dichloropropane	142-28-9	0.09	U	0.09	4.4	0.97
06192	2,2-Dichloropropane	594-20-7	0.19	U	0.19	4.4	0.97
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.4	0.97
06192	cis-1,3-Dichloropropene	10061-01-5	0.18	U	0.18	4.4	0.97
06192	trans-1,3-Dichloropropene	10061-02-6	0.19	U	0.19	4.4	0.97
06192	Ethylbenzene	100-41-4	0.07	U	0.07	4.4	0.97
06192	Freon 113	76-13-1	0.12	U	0.12	4.4	0.97
06192	Freon 133a	75-88-7	0.55	U	0.55	5.5	0.97
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.4	0.97
06192	2-Hexanone	591-78-6	1.8	U	1.8	8.8	0.97
06192	Isopropylbenzene	98-82-8	0.07	U	0.07	4.4	0.97
06192	p-Isopropyltoluene	99-87-6	0.12	U	0.12	4.4	0.97
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.23	U	0.23	4.4	0.97
06192	4-Methyl-2-pentanone	108-10-1	0.43	U	0.43	8.8	0.97
06192	Methylene Chloride	75-09-2	0.57	J	0.27	4.4	0.97
06192	n-Propylbenzene	103-65-1	0.08	U	0.08	4.4	0.97

*=This limit was used in the evaluation of the final result

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 12:31

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL073 SDG#: DE060-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.11	U	0.11	4.4	0.97
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12	U	0.12	4.4	0.97
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.25	U	0.25	4.4	0.97
06192	Tetrachloroethene	127-18-4	0.22	U	0.22	4.4	0.97
06192	Toluene	108-88-3	0.09	U	0.09	4.4	0.97
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.4	0.97
06192	1,2,4-Trichlorobenzene	120-82-1	0.20	U	0.20	4.4	0.97
06192	1,1,1-Trichloroethane	71-55-6	0.22	U	0.22	4.4	0.97
06192	1,1,2-Trichloroethane	79-00-5	0.30	U	0.30	4.4	0.97
06192	Trichloroethene	79-01-6	0.17	U	0.17	4.4	0.97
06192	Trichlorofluoromethane	75-69-4	0.32	U	0.32	4.4	0.97
06192	1,2,3-Trichloropropane	96-18-4	0.36	U	0.36	4.4	0.97
06192	1,2,4-Trimethylbenzene	95-63-6	0.44	U	0.44	4.4	0.97
06192	1,3,5-Trimethylbenzene	108-67-8	0.11	U	0.11	4.4	0.97
06192	Vinyl Chloride	75-01-4	0.22	U	0.22	4.4	0.97
06192	m+p-Xylene	179601-23-1	0.19	U	0.19	4.4	0.97
06192	o-Xylene	95-47-6	0.19	U	0.19	4.4	0.97
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.6	U	4.6	14	20.23
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U	190	570	1
04688	Benzyl alcohol	100-51-6	190	U	190	570	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190	1
04688	4-Chloroaniline	106-47-8	76	U	76	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570	1
04688	2,4-Dinitrophenol	51-28-5	760	U	760	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 12:31

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL073 SDG#: DE060-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	38	J	19	380	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	38	U	38	190	1
04688	4-Methylphenol	106-44-5	38	U	38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	38	U	38	190	1
04688	4-Nitroaniline	100-01-6	76	U	76	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	570	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	26	J	19	190	1
04688	Pentachlorophenol	87-86-5	190	U	190	570	1
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190	1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg		ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9	1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9	1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.76	U	0.76	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.76	U	0.76	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.76	U	0.76	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U	0.76	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U	0.76	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21	1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21	1
10138	Chrysene	218-01-9	0.38	U	0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9	1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21	1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21	1
10138	Fluoranthene	206-44-0	0.76	U	0.76	1.9	1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U	0.76	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 12:31

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL073 SDG#: DE060-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9	1
10138	Naphthalene	91-20-3	0.76	U	0.76	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9	1
10138	Phenanthrene	85-01-8	0.76	U	0.76	1.9	1
10138	Pyrene	129-00-0	0.76	U	0.76	1.9	1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.8	1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9	1
10225	PCB-1221	11104-28-2	0.57	U	0.57	1.9	1
10225	PCB-1232	11141-16-5	0.59	U	0.59	1.9	1
10225	PCB-1242	53469-21-9	0.57	U	0.57	1.9	1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9	1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9	1
10225	PCB-1260	11096-82-5	0.38	U	0.38	1.9	1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9	1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,400		27.6	110	5
07914	Boron	7440-42-8	4.89	U	4.89	27.5	5
	Reporting limits were raised due to interference from the sample matrix.						
01650	Calcium	7440-70-2	5,390		6.74	22.0	1
01654	Iron	7439-89-6	44,900		25.9	110	5
01656	Lithium	7439-93-2	53.7		0.24	2.2	1
01657	Magnesium	7439-95-4	9,860		2.79	11.0	1
06958	Manganese	7439-96-5	375		0.0857	0.549	1
10145	Phosphorus	7723-14-0	727		3.08	54.9	5
01662	Potassium	7440-09-7	3,810		98.9	275	5
01667	Sodium	7440-23-5	641		41.0	110	1
07968	Strontium	7440-24-6	37.5		0.0681	0.549	1
06969	Tin	7440-31-5	3.41	J	1.10	11.0	1
06970	Titanium	7440-32-6	1,940		2.09	5.49	5
10146	Zirconium	7440-67-7	1.25	J	0.923	5.49	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.311		0.0659	0.220	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	13.4		0.0879	0.440	2
06126	Barium	7440-39-3	163		0.119	0.440	2
06127	Beryllium	7440-41-7	1.28		0.0176	0.110	2
06128	Cadmium	7440-43-9	0.132		0.0440	0.110	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 12:31

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL073 SDG#: DE060-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06131	Chromium	7440-47-3	36.0	0.132	0.440	2
06132	Cobalt	7440-48-4	10.9	0.0220	0.110	2
06133	Copper	7440-50-8	23.5	0.0725	0.440	2
06135	Lead	7439-92-1	15.6	0.0114	0.220	2
06138	Molybdenum	7439-98-7	0.662	0.0549	0.110	2
06139	Nickel	7440-02-0	19.3	0.110	0.440	2
06141	Selenium	7782-49-2	0.149 J	0.0440	0.440	2
06142	Silver	7440-22-4	0.0698 J	0.0132	0.110	2
06145	Thallium	7440-28-0	0.380	0.0330	0.110	2
06148	Vanadium	7440-62-2	66.9	0.0242	0.110	2
06149	Zinc	7440-66-6	86.5	0.615	3.30	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0054 J	0.0031	0.107	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	7.3	0.91	1.1	1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3 U	10.3	34.3	1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.57 J	0.23	1.1	1
	ASTM D1498		**mV**	**mV**	**mV**	
01821	32a OR Potential	n.a.	440	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.74	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	12.5	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-073-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 12:31

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL073 SDG#: DE060-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/17/2011 22:06	Laura M Krieger	0.97
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 16:20	Jason M Long	20.23
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 14:51	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 14:52	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 09:27	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 10:07	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/26/2011 16:41	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:15	John P Hook	5
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 20:15	John P Hook	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
01654	Iron	SW-846 6010B	1	110195708001	01/21/2011 20:15	John P Hook	5
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:11	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:15	John P Hook	5
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:15	John P Hook	5
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:15	John P Hook	5
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:11	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:22	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:22	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:22	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-073-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-073-SA5B-SB-4.0-5.0

LLI Sample # SW 6183546
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 12:31

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL073 SDG#: DE060-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:22	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 11:57	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 08:23	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201A	01/24/2011 19:51	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 15:44	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201A	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102A	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402A	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401A	01/19/2011 19:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3014 SDG#: DE060-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
06192	Acetone	67-64-1	6.6	U	6.6	7.9	0.88
06192	Benzene	71-43-2	0.1	U	0.1	3.9	0.88
06192	Bromobenzene	108-86-1	0.13	U	0.13	3.9	0.88
06192	Bromochloromethane	74-97-5	0.32	U	0.32	3.9	0.88
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	3.9	0.88
06192	Bromoform	75-25-2	0.39	U	0.39	3.9	0.88
06192	Bromomethane	74-83-9	0.25	U	0.25	3.9	0.88
06192	2-Butanone	78-93-3	1.2	U	1.2	7.9	0.88
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	3.9	0.88
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	3.9	0.88
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	3.9	0.88
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	3.9	0.88
06192	Chlorobenzene	108-90-7	0.11	U	0.11	3.9	0.88
06192	Chloroethane	75-00-3	0.13	U	0.13	3.9	0.88
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.30	U	0.30	3.9	0.88
06192	Chloroform	67-66-3	0.12	U	0.12	3.9	0.88
06192	Chloromethane	74-87-3	0.32	U	0.32	3.9	0.88
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	3.9	0.88
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	3.9	0.88
06192	Chlorotrifluoroethene	79-38-9	0.49	U	0.49	4.9	0.88
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.69	U	0.69	3.9	0.88
06192	Dibromochloromethane	124-48-1	0.20	U	0.20	3.9	0.88
06192	1,2-Dibromoethane	106-93-4	0.17	U	0.17	3.9	0.88
06192	Dibromomethane	74-95-3	0.24	U	0.24	3.9	0.88
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	3.9	0.88
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	3.9	0.88
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	3.9	0.88
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	3.9	0.88
06192	1,1-Dichloroethane	75-34-3	0.1	U	0.1	3.9	0.88
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	3.9	0.88
06192	1,1-Dichloroethene	75-35-4	0.38	U	0.38	3.9	0.88
06192	cis-1,2-Dichloroethene	156-59-2	0.19	U	0.19	3.9	0.88
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	3.9	0.88
06192	1,2-Dichloropropane	78-87-5	0.17	U	0.17	3.9	0.88
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	3.9	0.88
06192	2,2-Dichloropropane	594-20-7	0.17	U	0.17	3.9	0.88
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	3.9	0.88
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	3.9	0.88
06192	trans-1,3-Dichloropropene	10061-02-6	0.17	U	0.17	3.9	0.88
06192	Ethylbenzene	100-41-4	0.06	U	0.06	3.9	0.88
06192	Freon 113	76-13-1	0.11	U	0.11	3.9	0.88
06192	Freon 133a	75-88-7	0.49	U	0.49	4.9	0.88
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	3.9	0.88
06192	2-Hexanone	591-78-6	1.6	U	1.6	7.9	0.88
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	3.9	0.88
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	3.9	0.88
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21	U	0.21	3.9	0.88
06192	4-Methyl-2-pentanone	108-10-1	0.38	U	0.38	7.9	0.88
06192	Methylene Chloride	75-09-2	0.45	J	0.24	3.9	0.88
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	3.9	0.88

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3014 SDG#: DE060-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.1	U	0.1	3.9	0.88
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	3.9	0.88
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.23	U	0.23	3.9	0.88
06192	Tetrachloroethene	127-18-4	0.20	U	0.20	3.9	0.88
06192	Toluene	108-88-3	0.08	U	0.08	3.9	0.88
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	3.9	0.88
06192	1,2,4-Trichlorobenzene	120-82-1	0.18	U	0.18	3.9	0.88
06192	1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	3.9	0.88
06192	1,1,2-Trichloroethane	79-00-5	0.27	U	0.27	3.9	0.88
06192	Trichloroethene	79-01-6	0.15	U	0.15	3.9	0.88
06192	Trichlorofluoromethane	75-69-4	0.29	U	0.29	3.9	0.88
06192	1,2,3-Trichloropropane	96-18-4	0.32	U	0.32	3.9	0.88
06192	1,2,4-Trimethylbenzene	95-63-6	0.39	U	0.39	3.9	0.88
06192	1,3,5-Trimethylbenzene	108-67-8	0.1	U	0.1	3.9	0.88
06192	Vinyl Chloride	75-01-4	0.20	U	0.20	3.9	0.88
06192	m+p-Xylene	179601-23-1	0.17	U	0.17	3.9	0.88
06192	o-Xylene	95-47-6	0.17	U	0.17	3.9	0.88
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.8	U	4.8	14	21.51
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	560	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzoic acid	65-85-0	190	U	190	560	1
04688	Benzyl alcohol	100-51-6	190	U	190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190	1
04688	4-Chloroaniline	106-47-8	75	U	75	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560	1
04688	2,4-Dinitrophenol	51-28-5	750	U	750	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3014 SDG#: DE060-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	21	J	19	370	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	37	U	37	190	1
04688	4-Methylphenol	106-44-5	37	U	37	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	37	U	37	190	1
04688	4-Nitroaniline	100-01-6	75	U	75	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	560	1
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190	1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg		ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75	U	0.75	1.9	1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.9	1
10138	Anthracene	120-12-7	0.37	U	0.37	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.75	U	0.75	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.75	U	0.75	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.75	U	0.75	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U	0.75	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U	0.75	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.7	U	6.7	20	1
10138	Di-n-butylphthalate	84-74-2	6.7	U	6.7	20	1
10138	Chrysene	218-01-9	0.37	U	0.37	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U	0.75	1.9	1
10138	Diethylphthalate	84-66-2	6.7	U	6.7	20	1
10138	Dimethylphthalate	131-11-3	6.7	U	6.7	20	1
10138	Fluoranthene	206-44-0	0.75	U	0.75	1.9	1
10138	Fluorene	86-73-7	0.75	U	0.75	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	U	0.75	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.75	U	0.75	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3014 SDG#: DE060-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	0.75	U	0.75	1.9	1
10138	Naphthalene	91-20-3	0.75	U	0.75	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U	0.75	1.9	1
10138	Di-n-octylphthalate	117-84-0	8.7	J	6.7	20	1
10138	Phenanthrene	85-01-8	0.75	U	0.75	1.9	1
10138	Pyrene	129-00-0	0.75	U	0.75	1.9	1
	Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9	1
10225	PCB-1232	11141-16-5	0.58	U	0.58	1.9	1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9	1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9	1
10225	PCB-1254	11097-69-1	0.37	U	0.37	1.9	1
10225	PCB-1260	11096-82-5	0.37	U	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	22,700		5.59	22.2	1
07914	Boron	7440-42-8	4.94	U	4.94	27.8	5
	Reporting limits for boron were raised due to interference from the sample matrix.						
01650	Calcium	7440-70-2	3,590		6.81	22.2	1
01654	Iron	7439-89-6	27,900		26.2	111	5
01656	Lithium	7439-93-2	36.9		0.24	2.2	1
01657	Magnesium	7439-95-4	6,030		2.82	11.1	1
06958	Manganese	7439-96-5	284		0.0867	0.556	1
10145	Phosphorus	7723-14-0	238		0.622	11.1	1
01662	Potassium	7440-09-7	2,290		20.0	55.6	1
01667	Sodium	7440-23-5	195		41.4	111	1
07968	Strontium	7440-24-6	27.5		0.0689	0.556	1
06969	Tin	7440-31-5	3.01	J	1.11	11.1	1
06970	Titanium	7440-32-6	1,370		0.422	1.11	1
10146	Zirconium	7440-67-7	2.28	J	0.933	5.56	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.152	J	0.0648	0.216	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3014 SDG#: DE060-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06125	Arsenic	7440-38-2	6.61	0.0863	0.432	2
06126	Barium	7440-39-3	129	0.117	0.432	2
06127	Beryllium	7440-41-7	0.788	0.0173	0.108	2
06128	Cadmium	7440-43-9	0.171	0.0432	0.108	2
06131	Chromium	7440-47-3	25.5	0.130	0.432	2
06132	Cobalt	7440-48-4	6.25	0.0216	0.108	2
06133	Copper	7440-50-8	13.2	0.0712	0.432	2
06135	Lead	7439-92-1	7.55	0.0112	0.216	2
06138	Molybdenum	7439-98-7	0.384	0.0540	0.108	2
06139	Nickel	7440-02-0	16.3	0.108	0.432	2
06141	Selenium	7782-49-2	0.0836 J	0.0432	0.432	2
06142	Silver	7440-22-4	0.0540 J	0.0130	0.108	2
06145	Thallium	7440-28-0	0.322	0.0324	0.108	2
06148	Vanadium	7440-62-2	44.1	0.0237	0.108	2
06149	Zinc	7440-66-6	65.7	0.604	3.24	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.112	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.4	0.90	1.1	1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.7	1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.25 J	0.22	1.1	1
	ASTM D1498		**mV**	**mV**	**mV**	
01821	32a OR Potential	n.a.	421	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.38	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	10.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3014 SDG#: DE060-02

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-301-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/17/2011 22:28	Laura M Krieger	0.88
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 16:40	Jason M Long	21.51
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 14:54	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 14:55	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 10:42	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 11:41	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/26/2011 17:37	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/24/2011 13:00	Eric L Eby	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/24/2011 13:00	Eric L Eby	5
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:18	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:18	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:26	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/23/2011 18:26	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-301-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-4.0-5.0

LLI Sample # SW 6183547
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3014 SDG#: DE060-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/23/2011 18:26	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:26	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:26	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:01	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 11:03	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201A	01/24/2011 20:14	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 15:57	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201A	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102A	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402A	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401A	01/19/2011 19:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-301-SA5B-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-7.5-8.5

LLI Sample # SW 6183548
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:48

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3047 SDG#: DE060-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	580	1
04688	Benzidine	92-87-5	1,400	U	1,400	3,900	1
04688	Benzoic acid	65-85-0	190	U	190	580	1
04688	Benzyl alcohol	100-51-6	190	U	190	580	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	190	1
04688	4-Chloroaniline	106-47-8	77	U	77	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	190	1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580	1
04688	2,4-Dinitrophenol	51-28-5	770	U	770	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	48	J	19	390	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	39	U	39	190	1
04688	4-Methylphenol	106-44-5	39	U	39	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	39	U	39	190	1
04688	4-Nitroaniline	100-01-6	77	U	77	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	580	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	580	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-7.5-8.5

LLI Sample # SW 6183548
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:48

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3047 SDG#: DE060-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	190	1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	190	1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.77	U	0.77	1.9	1
10138	Acenaphthylene	208-96-8	0.39	U	0.39	1.9	1
10138	Anthracene	120-12-7	0.39	U	0.39	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.77	U	0.77	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.77	U	0.77	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.77	U	0.77	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.77	U	0.77	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.77	U	0.77	1.9	1
10138	Butylbenzylphthalate	85-68-7	7.0	U	7.0	21	1
10138	Di-n-butylphthalate	84-74-2	7.0	U	7.0	21	1
10138	Chrysene	218-01-9	0.39	U	0.39	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.77	U	0.77	1.9	1
10138	Diethylphthalate	84-66-2	7.0	U	7.0	21	1
10138	Dimethylphthalate	131-11-3	7.0	U	7.0	21	1
10138	Fluoranthene	206-44-0	0.77	U	0.77	1.9	1
10138	Fluorene	86-73-7	0.77	U	0.77	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	U	0.77	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.77	U	0.77	1.9	1
10138	2-Methylnaphthalene	91-57-6	0.77	U	0.77	1.9	1
10138	Naphthalene	91-20-3	0.77	U	0.77	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.77	U	0.77	1.9	1
10138	Di-n-octylphthalate	117-84-0	8.6	J	7.0	21	1
10138	Phenanthrene	85-01-8	0.77	U	0.77	1.9	1
10138	Pyrene	129-00-0	0.77	U	0.77	1.9	1

Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8	1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8	1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.8	1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0	1
10225	PCB-1221	11104-28-2	0.58	U	0.58	2.0	1
10225	PCB-1232	11141-16-5	0.60	U	0.60	2.0	1
10225	PCB-1242	53469-21-9	0.58	U	0.58	2.0	1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0	1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0	1
10225	PCB-1260	11096-82-5	0.38	U	0.38	2.0	1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0	1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-301-SA5B-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-7.5-8.5

LLI Sample # SW 6183548
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:48

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3047 SDG#: DE060-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals		**SW-846 6010B**	**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,800		5.72	22.7	1
07914	Boron	7440-42-8	1.01	U	1.01	5.69	1
01650	Calcium	7440-70-2	2,710		6.97	22.7	1
01654	Iron	7439-89-6	21,100		5.36	22.7	1
01656	Lithium	7439-93-2	37.5		0.25	2.3	1
01657	Magnesium	7439-95-4	4,340		2.89	11.4	1
06958	Manganese	7439-96-5	197		0.0887	0.569	1
10145	Phosphorus	7723-14-0	213		0.637	11.4	1
01662	Potassium	7440-09-7	1,600		20.5	56.9	1
01667	Sodium	7440-23-5	156		42.4	114	1
07968	Strontium	7440-24-6	13.9		0.0705	0.569	1
06969	Tin	7440-31-5	2.48	J	1.14	11.4	1
06970	Titanium	7440-32-6	1,060		0.432	1.14	1
10146	Zirconium	7440-67-7	1.79	J	0.955	5.69	1
		SW-846 6020	**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0737	J	0.0682	0.227	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	4.93		0.0910	0.455	2
06126	Barium	7440-39-3	68.6		0.123	0.455	2
06127	Beryllium	7440-41-7	0.600		0.0182	0.114	2
06128	Cadmium	7440-43-9	0.0663	J	0.0455	0.114	2
06131	Chromium	7440-47-3	19.2		0.136	0.455	2
06132	Cobalt	7440-48-4	4.32		0.0227	0.114	2
06133	Copper	7440-50-8	9.32		0.0751	0.455	2
06135	Lead	7439-92-1	5.81		0.0118	0.227	2
06138	Molybdenum	7439-98-7	0.483		0.0569	0.114	2
06139	Nickel	7440-02-0	11.0		0.114	0.455	2
06141	Selenium	7782-49-2	0.0455	U	0.0455	0.455	2
06142	Silver	7440-22-4	0.106	J	0.0136	0.114	2
06145	Thallium	7440-28-0	0.222		0.0341	0.114	2
06148	Vanadium	7440-62-2	35.4		0.0250	0.114	2
06149	Zinc	7440-66-6	46.2		0.637	3.41	2
		SW-846 7471A	**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0056	J	0.0033	0.115	1
Wet Chemistry		**EPA 300.0**	**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.4		0.93	1.2	1
		EPA 314.0	**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4	U	10.4	34.8	1
		SW-846 7199	**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-301-SA5B-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-7.5-8.5

LLI Sample # SW 6183548
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:48

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3047 SDG#: DE060-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.60	J	0.23	1.2	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	32a OR Potential	n.a.	425		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.86		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	13.8		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 11:07	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 12:14	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/26/2011 17:56	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 20:22	John P Hook	1
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:22	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-301-SA5B-SB-7.5-8.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-301-SA5B-SB-7.5-8.5

LLI Sample # SW 6183548
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:48

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S3047 SDG#: DE060-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:22	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:29	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:29	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:29	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:29	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:02	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 10:50	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201A	01/24/2011 20:37	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 16:09	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201A	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102A	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402A	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401A	01/19/2011 19:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0744 SDG#: DE060-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
06192	Acetone	67-64-1	6.5	U	6.5	7.7	0.83
06192	Benzene	71-43-2	0.1	U	0.1	3.9	0.83
06192	Bromobenzene	108-86-1	0.13	U	0.13	3.9	0.83
06192	Bromochloromethane	74-97-5	0.32	U	0.32	3.9	0.83
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	3.9	0.83
06192	Bromoform	75-25-2	0.39	U	0.39	3.9	0.83
06192	Bromomethane	74-83-9	0.24	U	0.24	3.9	0.83
06192	2-Butanone	78-93-3	1.2	U	1.2	7.7	0.83
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	3.9	0.83
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	3.9	0.83
06192	tert-Butylbenzene	98-06-6	0.15	U	0.15	3.9	0.83
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	3.9	0.83
06192	Chlorobenzene	108-90-7	0.11	U	0.11	3.9	0.83
06192	Chloroethane	75-00-3	0.13	U	0.13	3.9	0.83
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.29	U	0.29	3.9	0.83
06192	Chloroform	67-66-3	0.12	U	0.12	3.9	0.83
06192	Chloromethane	74-87-3	0.32	U	0.32	3.9	0.83
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	3.9	0.83
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	3.9	0.83
06192	Chlorotrifluoroethene	79-38-9	0.48	U	0.48	4.8	0.83
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.68	U	0.68	3.9	0.83
06192	Dibromochloromethane	124-48-1	0.19	U	0.19	3.9	0.83
06192	1,2-Dibromoethane	106-93-4	0.16	U	0.16	3.9	0.83
06192	Dibromomethane	74-95-3	0.23	U	0.23	3.9	0.83
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	3.9	0.83
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	3.9	0.83
06192	1,4-Dichlorobenzene	106-46-7	0.15	U	0.15	3.9	0.83
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	3.9	0.83
06192	1,1-Dichloroethane	75-34-3	0.1	U	0.1	3.9	0.83
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	3.9	0.83
06192	1,1-Dichloroethene	75-35-4	0.38	U	0.38	3.9	0.83
06192	cis-1,2-Dichloroethene	156-59-2	0.18	U	0.18	3.9	0.83
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	3.9	0.83
06192	1,2-Dichloropropane	78-87-5	0.16	U	0.16	3.9	0.83
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	3.9	0.83
06192	2,2-Dichloropropane	594-20-7	0.16	U	0.16	3.9	0.83
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	3.9	0.83
06192	cis-1,3-Dichloropropene	10061-01-5	0.15	U	0.15	3.9	0.83
06192	trans-1,3-Dichloropropene	10061-02-6	0.16	U	0.16	3.9	0.83
06192	Ethylbenzene	100-41-4	0.06	U	0.06	3.9	0.83
06192	Freon 113	76-13-1	0.11	U	0.11	3.9	0.83
06192	Freon 133a	75-88-7	0.48	U	0.48	4.8	0.83
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	3.9	0.83
06192	2-Hexanone	591-78-6	1.5	U	1.5	7.7	0.83
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	3.9	0.83
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	3.9	0.83
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.20	U	0.20	3.9	0.83
06192	4-Methyl-2-pentanone	108-10-1	0.38	U	0.38	7.7	0.83
06192	Methylene Chloride	75-09-2	0.63	J	0.23	3.9	0.83
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	3.9	0.83

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0744 SDG#: DE060-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.1	U	0.1	3.9	0.83
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	3.9	0.83
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22	U	0.22	3.9	0.83
06192	Tetrachloroethene	127-18-4	0.19	U	0.19	3.9	0.83
06192	Toluene	108-88-3	0.08	J	0.08	3.9	0.83
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	3.9	0.83
06192	1,2,4-Trichlorobenzene	120-82-1	0.17	U	0.17	3.9	0.83
06192	1,1,1-Trichloroethane	71-55-6	0.19	U	0.19	3.9	0.83
06192	1,1,2-Trichloroethane	79-00-5	0.26	U	0.26	3.9	0.83
06192	Trichloroethene	79-01-6	0.15	U	0.15	3.9	0.83
06192	Trichlorofluoromethane	75-69-4	0.28	U	0.28	3.9	0.83
06192	1,2,3-Trichloropropane	96-18-4	0.32	U	0.32	3.9	0.83
06192	1,2,4-Trimethylbenzene	95-63-6	0.39	U	0.39	3.9	0.83
06192	1,3,5-Trimethylbenzene	108-67-8	0.1	U	0.1	3.9	0.83
06192	Vinyl Chloride	75-01-4	0.19	U	0.19	3.9	0.83
06192	m+p-Xylene	179601-23-1	0.16	U	0.16	3.9	0.83
06192	o-Xylene	95-47-6	0.16	U	0.16	3.9	0.83
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.9	U	4.9	15	20.97
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	580	1
04688	Benzidine	92-87-5	1,400	U	1,400	3,900	1
04688	Benzoic acid	65-85-0	190	U	190	580	1
04688	Benzyl alcohol	100-51-6	190	U	190	580	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	190	1
04688	4-Chloroaniline	106-47-8	77	U	77	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	190	1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580	1
04688	2,4-Dinitrophenol	51-28-5	770	U	770	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0744 SDG#: DE060-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	27	J	19	390	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	39	U	39	190	1
04688	4-Methylphenol	106-44-5	39	U	39	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	39	U	39	190	1
04688	4-Nitroaniline	100-01-6	77	U	77	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	580	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	580	1
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	190	1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	190	1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg		ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.77	U	0.77	1.9	1
10138	Acenaphthylene	208-96-8	0.39	U	0.39	1.9	1
10138	Anthracene	120-12-7	0.39	U	0.39	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.77	U	0.77	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.77	U	0.77	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.77	U	0.77	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.77	U	0.77	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.77	U	0.77	1.9	1
10138	Butylbenzylphthalate	85-68-7	7.0	U	7.0	21	1
10138	Di-n-butylphthalate	84-74-2	7.0	U	7.0	21	1
10138	Chrysene	218-01-9	0.39	U	0.39	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.77	U	0.77	1.9	1
10138	Diethylphthalate	84-66-2	7.0	U	7.0	21	1
10138	Dimethylphthalate	131-11-3	7.0	U	7.0	21	1
10138	Fluoranthene	206-44-0	0.77	U	0.77	1.9	1
10138	Fluorene	86-73-7	0.77	U	0.77	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	U	0.77	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.77	U	0.77	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0744 SDG#: DE060-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	0.77	U	0.77	1.9	1
10138	Naphthalene	91-20-3	0.77	U	0.77	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.77	U	0.77	1.9	1
10138	Di-n-octylphthalate	117-84-0	8.9	J	7.0	21	1
10138	Phenanthrene	85-01-8	0.77	U	0.77	1.9	1
10138	Pyrene	129-00-0	0.77	U	0.77	1.9	1
	Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8	1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8	1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.8	1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0	1
10225	PCB-1221	11104-28-2	0.58	U	0.58	2.0	1
10225	PCB-1232	11141-16-5	0.60	U	0.60	2.0	1
10225	PCB-1242	53469-21-9	0.58	U	0.58	2.0	1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0	1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0	1
10225	PCB-1260	11096-82-5	0.38	U	0.38	2.0	1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0	1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	27,300		5.61	22.3	1
07914	Boron	7440-42-8	4.96	U	4.96	27.9	5
	Reporting limits were raised due to interference from the sample matrix.						
01650	Calcium	7440-70-2	3,950		6.84	22.3	1
01654	Iron	7439-89-6	35,400		26.3	112	5
01656	Lithium	7439-93-2	39.6		0.25	2.2	1
01657	Magnesium	7439-95-4	7,060		2.83	11.2	1
06958	Manganese	7439-96-5	452		0.0870	0.558	1
10145	Phosphorus	7723-14-0	288		0.625	11.2	1
01662	Potassium	7440-09-7	2,920		20.1	55.8	1
01667	Sodium	7440-23-5	272		41.6	112	1
07968	Strontium	7440-24-6	26.7		0.0692	0.558	1
06969	Tin	7440-31-5	3.00	J	1.12	11.2	1
06970	Titanium	7440-32-6	1,460		0.424	1.12	1
10146	Zirconium	7440-67-7	1.66	J	0.937	5.58	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.195	J	0.0669	0.223	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	9.39		0.0892	0.446	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0744 SDG#: DE060-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06126	Barium	7440-39-3	129	0.120	0.446	2
06127	Beryllium	7440-41-7	1.03	0.0178	0.112	2
06128	Cadmium	7440-43-9	0.182	0.0446	0.112	2
06131	Chromium	7440-47-3	31.6	0.134	0.446	2
06132	Cobalt	7440-48-4	12.4	0.0223	0.112	2
06133	Copper	7440-50-8	17.9	0.0736	0.446	2
06135	Lead	7439-92-1	12.9	0.0116	0.223	2
06138	Molybdenum	7439-98-7	0.580	0.0558	0.112	2
06139	Nickel	7440-02-0	19.0	0.112	0.446	2
06141	Selenium	7782-49-2	0.121 J	0.0446	0.446	2
06142	Silver	7440-22-4	0.0588 J	0.0134	0.112	2
06145	Thallium	7440-28-0	0.385	0.0335	0.112	2
06148	Vanadium	7440-62-2	57.2	0.0245	0.112	2
06149	Zinc	7440-66-6	74.1	0.625	3.35	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.112	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.2	0.93	1.2	1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.8	1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.43 J	0.23	1.2	1
	ASTM D1498		**mV**	**mV**	**mV**	
01821	32a OR Potential	n.a.	457	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.21	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	13.8	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0744 SDG#: DE060-04

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-074-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/17/2011 22:51	Laura M Krieger	0.83
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 17:00	Jason M Long	20.97
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 14:57	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 14:58	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 11:32	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 12:45	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/26/2011 18:14	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 20:31	John P Hook	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
01654	Iron	SW-846 6010B	1	110195708001	01/21/2011 20:31	John P Hook	5
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:26	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:26	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:32	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-074-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-4.0-5.0

LLI Sample # SW 6183549
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:11

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0744 SDG#: DE060-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:32	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:32	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:32	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:03	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 11:15	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201A	01/24/2011 21:00	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 16:22	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201A	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102A	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402A	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401A	01/19/2011 19:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-074-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-7.0-8.0

LLI Sample # SW 6183550
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:16

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0747 SDG#: DE060-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	200	U	200	590	1
04688	Benzidine	92-87-5	1,400	U	1,400	3,900	1
04688	Benzoic acid	65-85-0	200	U	200	590	1
04688	Benzyl alcohol	100-51-6	200	U	200	590	1
04688	4-Bromophenyl-phenylether	101-55-3	20	U	20	200	1
04688	Carbazole	86-74-8	20	U	20	200	1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	200	1
04688	4-Chloroaniline	106-47-8	79	U	79	200	1
04688	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	200	1
04688	bis(2-Chloroethyl)ether	111-44-4	20	U	20	200	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	20	U	20	200	1
04688	2-Chloronaphthalene	91-58-7	20	U	20	200	1
04688	2-Chlorophenol	95-57-8	20	U	20	200	1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	200	1
04688	Dibenzofuran	132-64-9	20	U	20	200	1
04688	1,2-Dichlorobenzene	95-50-1	20	U	20	200	1
04688	1,3-Dichlorobenzene	541-73-1	20	U	20	200	1
04688	1,4-Dichlorobenzene	106-46-7	20	U	20	200	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390	1
04688	2,4-Dichlorophenol	120-83-2	20	U	20	200	1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	200	1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	200	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	590	1
04688	2,4-Dinitrophenol	51-28-5	790	U	790	2,400	1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	200	1
04688	2,6-Dinitrotoluene	606-20-2	20	U	20	200	1
04688	1,2-Diphenylhydrazine	122-66-7	20	U	20	200	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	21	J	20	390	1
04688	Hexachlorobenzene	118-74-1	20	U	20	200	1
04688	Hexachlorobutadiene	87-68-3	79	U	79	200	1
04688	Hexachlorocyclopentadiene	77-47-4	200	U	200	590	1
04688	Hexachloroethane	67-72-1	20	U	20	200	1
04688	Isophorone	78-59-1	20	U	20	200	1
04688	2-Methylphenol	95-48-7	39	U	39	200	1
04688	4-Methylphenol	106-44-5	39	U	39	200	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	20	U	20	200	1
04688	3-Nitroaniline	99-09-2	39	U	39	200	1
04688	4-Nitroaniline	100-01-6	79	U	79	200	1
04688	Nitrobenzene	98-95-3	20	U	20	200	1
04688	2-Nitrophenol	88-75-5	20	U	20	200	1
04688	4-Nitrophenol	100-02-7	200	U	200	590	1
04688	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	200	1
04688	N-Nitrosodiphenylamine	86-30-6	20	U	20	200	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	200	U	200	590	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-7.0-8.0

LLI Sample # SW 6183550
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:16

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0747 SDG#: DE060-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	20	U	20	200	1
04688	1,2,4-Trichlorobenzene	120-82-1	20	U	20	200	1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	200	1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	200	1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.79	U	0.79	2.0	1
10138	Acenaphthylene	208-96-8	0.39	U	0.39	2.0	1
10138	Anthracene	120-12-7	0.39	U	0.39	2.0	1
10138	Benzo(a)anthracene	56-55-3	0.79	U	0.79	2.0	1
10138	Benzo(a)pyrene	50-32-8	0.79	U	0.79	2.0	1
10138	Benzo(b)fluoranthene	205-99-2	0.79	U	0.79	2.0	1
10138	Benzo(g,h,i)perylene	191-24-2	0.79	U	0.79	2.0	1
10138	Benzo(k)fluoranthene	207-08-9	0.79	U	0.79	2.0	1
10138	Butylbenzylphthalate	85-68-7	7.1	U	7.1	21	1
10138	Di-n-butylphthalate	84-74-2	7.1	U	7.1	21	1
10138	Chrysene	218-01-9	0.39	U	0.39	2.0	1
10138	Dibenz(a,h)anthracene	53-70-3	0.79	U	0.79	2.0	1
10138	Diethylphthalate	84-66-2	7.1	U	7.1	21	1
10138	Dimethylphthalate	131-11-3	7.1	U	7.1	21	1
10138	Fluoranthene	206-44-0	0.79	U	0.79	2.0	1
10138	Fluorene	86-73-7	0.79	U	0.79	2.0	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.79	U	0.79	2.0	1
10138	1-Methylnaphthalene	90-12-0	0.79	U	0.79	2.0	1
10138	2-Methylnaphthalene	91-57-6	0.79	U	0.79	2.0	1
10138	Naphthalene	91-20-3	0.79	U	0.79	2.0	1
10138	N-Nitrosodimethylamine	62-75-9	0.79	U	0.79	2.0	1
10138	Di-n-octylphthalate	117-84-0	8.8	J	7.1	21	1
10138	Phenanthrene	85-01-8	0.79	U	0.79	2.0	1
10138	Pyrene	129-00-0	0.79	U	0.79	2.0	1

Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.9	1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.9	1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.9	1
10225	PCB-1016	12674-11-2	0.39	U	0.39	2.0	1
10225	PCB-1221	11104-28-2	0.59	U	0.59	2.0	1
10225	PCB-1232	11141-16-5	0.61	U	0.61	2.0	1
10225	PCB-1242	53469-21-9	0.59	U	0.59	2.0	1
10225	PCB-1248	12672-29-6	0.39	U	0.39	2.0	1
10225	PCB-1254	11097-69-1	0.39	U	0.39	2.0	1
10225	PCB-1260	11096-82-5	0.39	U	0.39	2.0	1
10225	PCB-1262	37324-23-5	0.39	U	0.39	2.0	1
10225	PCB-1268	11100-14-4	0.39	U	0.39	2.0	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-074-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-7.0-8.0

LLI Sample # SW 6183550
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:16

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0747 SDG#: DE060-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,700		5.70	22.7	1
07914	Boron	7440-42-8	5.05	U	5.05	28.3	5
	Reporting limits were raised due to interference from the sample matrix.						
01650	Calcium	7440-70-2	5,140		6.95	22.7	1
01654	Iron	7439-89-6	40,700		26.7	113	5
01656	Lithium	7439-93-2	63.9		0.25	2.3	1
01657	Magnesium	7439-95-4	7,900		2.88	11.3	1
06958	Manganese	7439-96-5	269		0.0884	0.567	1
10145	Phosphorus	7723-14-0	609		0.635	11.3	1
01662	Potassium	7440-09-7	2,630		20.4	56.7	1
01667	Sodium	7440-23-5	325		42.3	113	1
07968	Strontium	7440-24-6	29.2		0.0703	0.567	1
06969	Tin	7440-31-5	3.21	J	1.13	11.3	1
06970	Titanium	7440-32-6	1,620		0.431	1.13	1
10146	Zirconium	7440-67-7	2.53	J	0.952	5.67	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.442		0.0680	0.227	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	18.4		0.0907	0.454	2
06126	Barium	7440-39-3	122		0.122	0.454	2
06127	Beryllium	7440-41-7	1.09		0.0181	0.113	2
06128	Cadmium	7440-43-9	0.183		0.0454	0.113	2
06131	Chromium	7440-47-3	36.8		0.136	0.454	2
06132	Cobalt	7440-48-4	7.15		0.0227	0.113	2
06133	Copper	7440-50-8	26.1		0.0748	0.454	2
06135	Lead	7439-92-1	15.0		0.0118	0.227	2
06138	Molybdenum	7439-98-7	0.808		0.0567	0.113	2
06139	Nickel	7440-02-0	20.8		0.113	0.454	2
06141	Selenium	7782-49-2	0.135	J	0.0454	0.454	2
06142	Silver	7440-22-4	0.167		0.0136	0.113	2
06145	Thallium	7440-28-0	0.359		0.0340	0.113	2
06148	Vanadium	7440-62-2	63.0		0.0249	0.113	2
06149	Zinc	7440-66-6	92.5		0.635	3.40	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0218	J	0.0032	0.112	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	7.5		0.94	1.2	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.6	U	10.6	35.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-7.0-8.0

LLI Sample # SW 6183550
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:16

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0747 SDG#: DE060-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.54	J	0.24	1.2	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	32a OR Potential	n.a.	348		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.81		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	15.2		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 11:58	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 13:17	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/26/2011 18:33	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 20:38	John P Hook	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
01654	Iron	SW-846 6010B	1	110195708001	01/21/2011 20:38	John P Hook	5
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:34	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-074-SA5B-SB-7.0-8.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-074-SA5B-SB-7.0-8.0

LLI Sample # SW 6183550
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:16

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0747 SDG#: DE060-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:34	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:35	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:35	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:35	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:35	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:04	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 11:51	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/24/2011 21:23	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 16:34	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S1214 SDG#: DE060-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
06192	Acetone	67-64-1	6.5	U	6.5	7.8	0.9
06192	Benzene	71-43-2	0.1	U	0.1	3.9	0.9
06192	Bromobenzene	108-86-1	0.13	U	0.13	3.9	0.9
06192	Bromochloromethane	74-97-5	0.32	U	0.32	3.9	0.9
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	3.9	0.9
06192	Bromoform	75-25-2	0.39	U	0.39	3.9	0.9
06192	Bromomethane	74-83-9	0.24	U	0.24	3.9	0.9
06192	2-Butanone	78-93-3	1.2	U	1.2	7.8	0.9
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	3.9	0.9
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	3.9	0.9
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	3.9	0.9
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	3.9	0.9
06192	Chlorobenzene	108-90-7	0.11	U	0.11	3.9	0.9
06192	Chloroethane	75-00-3	0.13	U	0.13	3.9	0.9
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.29	U	0.29	3.9	0.9
06192	Chloroform	67-66-3	0.12	U	0.12	3.9	0.9
06192	Chloromethane	74-87-3	0.32	U	0.32	3.9	0.9
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	3.9	0.9
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	3.9	0.9
06192	Chlorotrifluoroethene	79-38-9	0.49	U	0.49	4.9	0.9
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.68	U	0.68	3.9	0.9
06192	Dibromochloromethane	124-48-1	0.20	U	0.20	3.9	0.9
06192	1,2-Dibromoethane	106-93-4	0.17	U	0.17	3.9	0.9
06192	Dibromomethane	74-95-3	0.23	U	0.23	3.9	0.9
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	3.9	0.9
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	3.9	0.9
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	3.9	0.9
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	3.9	0.9
06192	1,1-Dichloroethane	75-34-3	0.1	U	0.1	3.9	0.9
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	3.9	0.9
06192	1,1-Dichloroethene	75-35-4	0.38	U	0.38	3.9	0.9
06192	cis-1,2-Dichloroethene	156-59-2	0.18	U	0.18	3.9	0.9
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	3.9	0.9
06192	1,2-Dichloropropane	78-87-5	0.17	U	0.17	3.9	0.9
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	3.9	0.9
06192	2,2-Dichloropropane	594-20-7	0.17	U	0.17	3.9	0.9
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	3.9	0.9
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	3.9	0.9
06192	trans-1,3-Dichloropropene	10061-02-6	0.17	U	0.17	3.9	0.9
06192	Ethylbenzene	100-41-4	0.06	U	0.06	3.9	0.9
06192	Freon 113	76-13-1	0.11	U	0.11	3.9	0.9
06192	Freon 133a	75-88-7	0.49	U	0.49	4.9	0.9
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	3.9	0.9
06192	2-Hexanone	591-78-6	1.6	U	1.6	7.8	0.9
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	3.9	0.9
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	3.9	0.9
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.21	U	0.21	3.9	0.9
06192	4-Methyl-2-pentanone	108-10-1	0.38	U	0.38	7.8	0.9
06192	Methylene Chloride	75-09-2	0.77	J	0.23	3.9	0.9
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	3.9	0.9

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S1214 SDG#: DE060-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.1	U	0.1	3.9	0.9
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	3.9	0.9
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22	U	0.22	3.9	0.9
06192	Tetrachloroethene	127-18-4	0.20	U	0.20	3.9	0.9
06192	Toluene	108-88-3	0.12	J	0.08	3.9	0.9
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	3.9	0.9
06192	1,2,4-Trichlorobenzene	120-82-1	0.18	U	0.18	3.9	0.9
06192	1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	3.9	0.9
06192	1,1,2-Trichloroethane	79-00-5	0.26	U	0.26	3.9	0.9
06192	Trichloroethene	79-01-6	0.15	U	0.15	3.9	0.9
06192	Trichlorofluoromethane	75-69-4	0.28	U	0.28	3.9	0.9
06192	1,2,3-Trichloropropane	96-18-4	0.32	U	0.32	3.9	0.9
06192	1,2,4-Trimethylbenzene	95-63-6	0.39	U	0.39	3.9	0.9
06192	1,3,5-Trimethylbenzene	108-67-8	0.1	U	0.1	3.9	0.9
06192	Vinyl Chloride	75-01-4	0.20	U	0.20	3.9	0.9
06192	m+p-Xylene	179601-23-1	0.17	U	0.17	3.9	0.9
06192	o-Xylene	95-47-6	0.17	U	0.17	3.9	0.9
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.0	U	5.0	15	23.15
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	540	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600	1
04688	Benzoic acid	65-85-0	180	U	180	540	1
04688	Benzyl alcohol	100-51-6	180	U	180	540	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180	1
04688	4-Chloroaniline	106-47-8	72	U	72	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180	1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540	1
04688	2,4-Dinitrophenol	51-28-5	720	U	720	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S1214 SDG#: DE060-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	20	J	18	360	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	72	U	72	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	36	U	36	180	1
04688	4-Methylphenol	106-44-5	36	U	36	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	36	U	36	180	1
04688	4-Nitroaniline	100-01-6	72	U	72	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	540	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	540	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180	1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180	1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg		ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8	1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8	1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.72	U	0.72	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.72	U	0.72	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.72	U	0.72	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U	0.72	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.72	U	0.72	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	19	1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	19	1
10138	Chrysene	218-01-9	0.36	U	0.36	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U	0.72	1.8	1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	19	1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	19	1
10138	Fluoranthene	206-44-0	0.72	U	0.72	1.8	1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	U	0.72	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.72	U	0.72	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S1214 SDG#: DE060-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	0.72	U	0.72	1.8	1
10138	Naphthalene	91-20-3	0.72	U	0.72	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8	1
10138	Di-n-octylphthalate	117-84-0	8.0	J	6.5	19	1
10138	Phenanthrene	85-01-8	0.72	U	0.72	1.8	1
10138	Pyrene	129-00-0	0.72	U	0.72	1.8	1
	Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.8	1
10225	PCB-1221	11104-28-2	0.54	U	0.54	1.8	1
10225	PCB-1232	11141-16-5	0.56	U	0.56	1.8	1
10225	PCB-1242	53469-21-9	0.54	U	0.54	1.8	1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.8	1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.8	1
10225	PCB-1260	11096-82-5	0.36	U	0.36	1.8	1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.8	1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.8	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	11,000		5.38	21.4	1
07914	Boron	7440-42-8	0.953	U	0.953	5.35	1
01650	Calcium	7440-70-2	3,140		6.56	21.4	1
01654	Iron	7439-89-6	16,700		5.04	21.4	1
01656	Lithium	7439-93-2	19.7		0.24	2.1	1
01657	Magnesium	7439-95-4	3,700		2.72	10.7	1
06958	Manganese	7439-96-5	530		0.0835	0.535	1
10145	Phosphorus	7723-14-0	429		0.599	10.7	1
01662	Potassium	7440-09-7	2,130		19.3	53.5	1
01667	Sodium	7440-23-5	68.0	J	39.9	107	1
07968	Strontium	7440-24-6	11.0		0.0664	0.535	1
06969	Tin	7440-31-5	2.15	J	1.07	10.7	1
06970	Titanium	7440-32-6	1,010		0.407	1.07	1
10146	Zirconium	7440-67-7	1.92	J	0.899	5.35	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0839	J	0.0642	0.214	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	6.92		0.0856	0.428	2
06126	Barium	7440-39-3	76.1		0.116	0.428	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S1214 SDG#: DE060-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	
06127	Beryllium	7440-41-7	0.436		0.0171	0.107	2
06128	Cadmium	7440-43-9	0.0657	J	0.0428	0.107	2
06131	Chromium	7440-47-3	16.2		0.128	0.428	2
06132	Cobalt	7440-48-4	4.94		0.0214	0.107	2
06133	Copper	7440-50-8	9.18		0.0706	0.428	2
06135	Lead	7439-92-1	4.24		0.0111	0.214	2
06138	Molybdenum	7439-98-7	0.206		0.0535	0.107	2
06139	Nickel	7440-02-0	12.0		0.107	0.428	2
06141	Selenium	7782-49-2	0.117	J	0.0428	0.428	2
06142	Silver	7440-22-4	0.0157	J	0.0128	0.107	2
06145	Thallium	7440-28-0	0.210		0.0321	0.107	2
06148	Vanadium	7440-62-2	26.4		0.0235	0.107	2
06149	Zinc	7440-66-6	48.6		0.599	3.21	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0077	J	0.0030	0.105	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.3		0.86	1.1	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.7	U	9.7	32.4	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	32a OR Potential	n.a.	349		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	8.04		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	7.5		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S1214 SDG#: DE060-06

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-121-SA5B-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/17/2011 23:36	Laura M Krieger	0.9
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 17:20	Jason M Long	23.15
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:01	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 15:01	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 12:23	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 13:49	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/26/2011 18:51	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 20:42	John P Hook	1
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:42	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:42	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:38	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183551
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S1214 SDG#: DE060-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:38	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:38	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:38	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:05	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 12:04	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/24/2011 22:56	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11025243202A	01/29/2011 16:40	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183552
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S1219 SDG#: DE060-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	220	U	220	650	1
04688	Benzidine	92-87-5	1,500	U	1,500	4,300	1
04688	Benzoic acid	65-85-0	220	U	220	650	1
04688	Benzyl alcohol	100-51-6	220	U	220	650	1
04688	4-Bromophenyl-phenylether	101-55-3	22	U	22	220	1
04688	Carbazole	86-74-8	22	U	22	220	1
04688	4-Chloro-3-methylphenol	59-50-7	43	U	43	220	1
04688	4-Chloroaniline	106-47-8	87	U	87	220	1
04688	bis(2-Chloroethoxy)methane	111-91-1	22	U	22	220	1
04688	bis(2-Chloroethyl)ether	111-44-4	22	U	22	220	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	22	U	22	220	1
04688	2-Chloronaphthalene	91-58-7	22	U	22	220	1
04688	2-Chlorophenol	95-57-8	22	U	22	220	1
04688	4-Chlorophenyl-phenylether	7005-72-3	43	U	43	220	1
04688	Dibenzofuran	132-64-9	22	U	22	220	1
04688	1,2-Dichlorobenzene	95-50-1	22	U	22	220	1
04688	1,3-Dichlorobenzene	541-73-1	22	U	22	220	1
04688	1,4-Dichlorobenzene	106-46-7	22	U	22	220	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U	130	430	1
04688	2,4-Dichlorophenol	120-83-2	22	U	22	220	1
04688	2,4-Dimethylphenol	105-67-9	43	U	43	220	1
04688	3,5-Dimethylphenol	108-68-9	43	U	43	220	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	220	U	220	650	1
04688	2,4-Dinitrophenol	51-28-5	870	U	870	2,600	1
04688	2,4-Dinitrotoluene	121-14-2	43	U	43	220	1
04688	2,6-Dinitrotoluene	606-20-2	22	U	22	220	1
04688	1,2-Diphenylhydrazine	122-66-7	22	U	22	220	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	22	J	22	430	1
04688	Hexachlorobenzene	118-74-1	22	U	22	220	1
04688	Hexachlorobutadiene	87-68-3	87	U	87	220	1
04688	Hexachlorocyclopentadiene	77-47-4	220	U	220	650	1
04688	Hexachloroethane	67-72-1	22	U	22	220	1
04688	Isophorone	78-59-1	22	U	22	220	1
04688	2-Methylphenol	95-48-7	43	U	43	220	1
04688	4-Methylphenol	106-44-5	43	U	43	220	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	22	U	22	220	1
04688	3-Nitroaniline	99-09-2	43	U	43	220	1
04688	4-Nitroaniline	100-01-6	87	U	87	220	1
04688	Nitrobenzene	98-95-3	22	U	22	220	1
04688	2-Nitrophenol	88-75-5	22	U	22	220	1
04688	4-Nitrophenol	100-02-7	220	U	220	650	1
04688	N-Nitroso-di-n-propylamine	621-64-7	22	U	22	220	1
04688	N-Nitrosodiphenylamine	86-30-6	22	U	22	220	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	220	U	220	650	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183552
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S1219 SDG#: DE060-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	22	U	22	220	1
04688	1,2,4-Trichlorobenzene	120-82-1	22	U	22	220	1
04688	2,4,5-Trichlorophenol	95-95-4	43	U	43	220	1
04688	2,4,6-Trichlorophenol	88-06-2	43	U	43	220	1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.87	U	0.87	2.2	1
10138	Acenaphthylene	208-96-8	0.43	U	0.43	2.2	1
10138	Anthracene	120-12-7	0.43	U	0.43	2.2	1
10138	Benzo(a)anthracene	56-55-3	0.87	U	0.87	2.2	1
10138	Benzo(a)pyrene	50-32-8	0.87	U	0.87	2.2	1
10138	Benzo(b)fluoranthene	205-99-2	0.87	U	0.87	2.2	1
10138	Benzo(g,h,i)perylene	191-24-2	0.87	U	0.87	2.2	1
10138	Benzo(k)fluoranthene	207-08-9	0.87	U	0.87	2.2	1
10138	Butylbenzylphthalate	85-68-7	7.8	U	7.8	23	1
10138	Di-n-butylphthalate	84-74-2	7.8	U	7.8	23	1
10138	Chrysene	218-01-9	0.43	U	0.43	2.2	1
10138	Dibenz(a,h)anthracene	53-70-3	0.87	U	0.87	2.2	1
10138	Diethylphthalate	84-66-2	7.8	U	7.8	23	1
10138	Dimethylphthalate	131-11-3	7.8	U	7.8	23	1
10138	Fluoranthene	206-44-0	0.87	U	0.87	2.2	1
10138	Fluorene	86-73-7	0.87	U	0.87	2.2	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.87	U	0.87	2.2	1
10138	1-Methylnaphthalene	90-12-0	0.87	U	0.87	2.2	1
10138	2-Methylnaphthalene	91-57-6	0.87	U	0.87	2.2	1
10138	Naphthalene	91-20-3	0.87	U	0.87	2.2	1
10138	N-Nitrosodimethylamine	62-75-9	0.87	U	0.87	2.2	1
10138	Di-n-octylphthalate	117-84-0	9.8	J	7.8	23	1
10138	Phenanthrene	85-01-8	0.87	U	0.87	2.2	1
10138	Pyrene	129-00-0	0.87	U	0.87	2.2	1

Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.3	U	1.3	4.3	1
10225	Aroclor 5442	12642-23-8	1.3	U	1.3	4.3	1
10225	Aroclor 5460	11126-42-4	1.3	U	1.3	4.3	1
10225	PCB-1016	12674-11-2	0.43	U	0.43	2.2	1
10225	PCB-1221	11104-28-2	0.65	U	0.65	2.2	1
10225	PCB-1232	11141-16-5	0.68	U	0.68	2.2	1
10225	PCB-1242	53469-21-9	0.65	U	0.65	2.2	1
10225	PCB-1248	12672-29-6	0.43	U	0.43	2.2	1
10225	PCB-1254	11097-69-1	0.43	U	0.43	2.2	1
10225	PCB-1260	11096-82-5	0.43	U	0.43	2.2	1
10225	PCB-1262	37324-23-5	0.43	U	0.43	2.2	1
10225	PCB-1268	11100-14-4	0.43	U	0.43	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183552
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S1219 SDG#: DE060-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	38,500		31.7	126	5
07914	Boron	7440-42-8	5.61	U	5.61	31.5	5
	Reporting limits were raised due to interference from the sample matrix.						
01650	Calcium	7440-70-2	12,200		7.73	25.2	1
01654	Iron	7439-89-6	61,000		29.7	126	5
01656	Lithium	7439-93-2	67.2		0.28	2.5	1
01657	Magnesium	7439-95-4	14,000		3.20	12.6	1
06958	Manganese	7439-96-5	640		0.0983	0.630	1
10145	Phosphorus	7723-14-0	2,020		3.53	63.0	5
01662	Potassium	7440-09-7	5,350		113	315	5
01667	Sodium	7440-23-5	522		47.0	126	1
07968	Strontium	7440-24-6	54.4		0.0782	0.630	1
06969	Tin	7440-31-5	3.08	J	1.26	12.6	1
06970	Titanium	7440-32-6	2,170		2.40	6.30	5
10146	Zirconium	7440-67-7	1.83	J	1.06	6.30	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.145	J	0.0779	0.260	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.19		0.104	0.519	2
06126	Barium	7440-39-3	399		0.351	1.30	5
06127	Beryllium	7440-41-7	1.66		0.0208	0.130	2
06128	Cadmium	7440-43-9	0.226		0.0519	0.130	2
06131	Chromium	7440-47-3	62.1		0.156	0.519	2
06132	Cobalt	7440-48-4	16.1		0.0260	0.130	2
06133	Copper	7440-50-8	35.3		0.0857	0.519	2
06135	Lead	7439-92-1	13.3		0.0135	0.260	2
06138	Molybdenum	7439-98-7	0.945		0.0649	0.130	2
06139	Nickel	7440-02-0	40.5		0.130	0.519	2
06141	Selenium	7782-49-2	0.0697	J	0.0519	0.519	2
06142	Silver	7440-22-4	0.179		0.0156	0.130	2
06145	Thallium	7440-28-0	0.576		0.0390	0.130	2
06148	Vanadium	7440-62-2	79.6		0.0286	0.130	2
06149	Zinc	7440-66-6	112		0.727	3.90	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0477	J	0.0036	0.126	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.6		1.0	1.3	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.7	U	11.7	39.0	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183552
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S1219 SDG#: DE060-07

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 7199**		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.49	J	0.26	1.3	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	32a OR Potential	n.a.	383		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.60		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	23.0		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 12:48	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 14:21	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/27/2011 20:03	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 20:58	John P Hook	5
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 20:58	John P Hook	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1
01654	Iron	SW-846 6010B	1	110195708001	01/21/2011 20:58	John P Hook	5
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 20:53	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 20:58	John P Hook	5
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 20:58	John P Hook	5
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183552
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S1219 SDG#: DE060-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 20:58	John P Hook	5
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 20:53	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/23/2011 18:28	David K Beck	5
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:41	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:41	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:41	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:06	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 12:16	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/24/2011 23:19	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11025243202A	01/29/2011 17:55	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL120 SDG#: DE060-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
06192	Acetone	67-64-1	7.2	U	7.2	8.6	0.98
06192	Benzene	71-43-2	0.11	U	0.11	4.3	0.98
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.3	0.98
06192	Bromochloromethane	74-97-5	0.35	U	0.35	4.3	0.98
06192	Bromodichloromethane	75-27-4	0.09	U	0.09	4.3	0.98
06192	Bromoform	75-25-2	0.43	U	0.43	4.3	0.98
06192	Bromomethane	74-83-9	0.27	U	0.27	4.3	0.98
06192	2-Butanone	78-93-3	1.3	U	1.3	8.6	0.98
06192	n-Butylbenzene	104-51-8	0.13	U	0.13	4.3	0.98
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.3	0.98
06192	tert-Butylbenzene	98-06-6	0.17	U	0.17	4.3	0.98
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.3	0.98
06192	Chlorobenzene	108-90-7	0.12	U	0.12	4.3	0.98
06192	Chloroethane	75-00-3	0.14	U	0.14	4.3	0.98
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.32	U	0.32	4.3	0.98
06192	Chloroform	67-66-3	0.13	U	0.13	4.3	0.98
06192	Chloromethane	74-87-3	0.35	U	0.35	4.3	0.98
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.3	0.98
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.3	0.98
06192	Chlorotrifluoroethene	79-38-9	0.54	U	0.54	5.4	0.98
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.75	U	0.75	4.3	0.98
06192	Dibromochloromethane	124-48-1	0.22	U	0.22	4.3	0.98
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.3	0.98
06192	Dibromomethane	74-95-3	0.26	U	0.26	4.3	0.98
06192	1,2-Dichlorobenzene	95-50-1	0.1	U	0.1	4.3	0.98
06192	1,3-Dichlorobenzene	541-73-1	0.13	U	0.13	4.3	0.98
06192	1,4-Dichlorobenzene	106-46-7	0.17	U	0.17	4.3	0.98
06192	Dichlorodifluoromethane	75-71-8	0.13	U	0.13	4.3	0.98
06192	1,1-Dichloroethane	75-34-3	0.11	U	0.11	4.3	0.98
06192	1,2-Dichloroethane	107-06-2	0.16	U	0.16	4.3	0.98
06192	1,1-Dichloroethene	75-35-4	0.42	U	0.42	4.3	0.98
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.3	0.98
06192	trans-1,2-Dichloroethene	156-60-5	0.13	U	0.13	4.3	0.98
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.3	0.98
06192	1,3-Dichloropropane	142-28-9	0.09	U	0.09	4.3	0.98
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.3	0.98
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.3	0.98
06192	cis-1,3-Dichloropropene	10061-01-5	0.17	U	0.17	4.3	0.98
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.3	0.98
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.3	0.98
06192	Freon 113	76-13-1	0.12	U	0.12	4.3	0.98
06192	Freon 133a	75-88-7	0.54	U	0.54	5.4	0.98
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.3	0.98
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.6	0.98
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.3	0.98
06192	p-Isopropyltoluene	99-87-6	0.12	U	0.12	4.3	0.98
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.23	U	0.23	4.3	0.98
06192	4-Methyl-2-pentanone	108-10-1	0.42	U	0.42	8.6	0.98
06192	Methylene Chloride	75-09-2	0.91	J	0.26	4.3	0.98
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.3	0.98

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL120 SDG#: DE060-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.11	U	0.11	4.3	0.98
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.12	U	0.12	4.3	0.98
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.25	U	0.25	4.3	0.98
06192	Tetrachloroethene	127-18-4	0.22	U	0.22	4.3	0.98
06192	Toluene	108-88-3	0.1	J	0.09	4.3	0.98
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.3	0.98
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.3	0.98
06192	1,1,1-Trichloroethane	71-55-6	0.22	U	0.22	4.3	0.98
06192	1,1,2-Trichloroethane	79-00-5	0.29	U	0.29	4.3	0.98
06192	Trichloroethene	79-01-6	0.16	U	0.16	4.3	0.98
06192	Trichlorofluoromethane	75-69-4	0.31	U	0.31	4.3	0.98
06192	1,2,3-Trichloropropane	96-18-4	0.35	U	0.35	4.3	0.98
06192	1,2,4-Trimethylbenzene	95-63-6	0.43	U	0.43	4.3	0.98
06192	1,3,5-Trimethylbenzene	108-67-8	0.11	U	0.11	4.3	0.98
06192	Vinyl Chloride	75-01-4	0.22	U	0.22	4.3	0.98
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.3	0.98
06192	o-Xylene	95-47-6	0.18	U	0.18	4.3	0.98
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.2	U	5.2	16	23.72
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700	1
04688	Benzoic acid	65-85-0	180	U	180	550	1
04688	Benzyl alcohol	100-51-6	180	U	180	550	1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180	1
04688	Carbazole	86-74-8	18	U	18	180	1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180	1
04688	4-Chloroaniline	106-47-8	73	U	73	180	1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180	1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180	1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180	1
04688	2-Chlorophenol	95-57-8	18	U	18	180	1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180	1
04688	Dibenzofuran	132-64-9	18	U	18	180	1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180	1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180	1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180	1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180	1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
04688	2,4-Dinitrophenol	51-28-5	730	U	730	2,200	1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180	1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180	1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL120 SDG#: DE060-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	23	J	18	370	1
04688	Hexachlorobenzene	118-74-1	18	U	18	180	1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180	1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
04688	Hexachloroethane	67-72-1	18	U	18	180	1
04688	Isophorone	78-59-1	18	U	18	180	1
04688	2-Methylphenol	95-48-7	37	U	37	180	1
04688	4-Methylphenol	106-44-5	37	U	37	180	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	18	U	18	180	1
04688	3-Nitroaniline	99-09-2	37	U	37	180	1
04688	4-Nitroaniline	100-01-6	73	U	73	180	1
04688	Nitrobenzene	98-95-3	18	U	18	180	1
04688	2-Nitrophenol	88-75-5	18	U	18	180	1
04688	4-Nitrophenol	100-02-7	180	U	180	550	1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180	1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	180	U	180	550	1
04688	Phenol	108-95-2	18	U	18	180	1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180	1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180	1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180	1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg		ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8	1
10138	Acenaphthylene	208-96-8	0.37	U	0.37	1.8	1
10138	Anthracene	120-12-7	0.37	U	0.37	1.8	1
10138	Benzo(a)anthracene	56-55-3	0.73	U	0.73	1.8	1
10138	Benzo(a)pyrene	50-32-8	0.73	U	0.73	1.8	1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U	0.73	1.8	1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U	0.73	1.8	1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U	0.73	1.8	1
10138	Butylbenzylphthalate	85-68-7	6.6	U	6.6	20	1
10138	Di-n-butylphthalate	84-74-2	6.6	U	6.6	20	1
10138	Chrysene	218-01-9	0.37	U	0.37	1.8	1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8	1
10138	Diethylphthalate	84-66-2	6.6	U	6.6	20	1
10138	Dimethylphthalate	131-11-3	6.6	U	6.6	20	1
10138	Fluoranthene	206-44-0	0.73	U	0.73	1.8	1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U	0.73	1.8	1
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL120 SDG#: DE060-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8	1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8	1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8	1
10138	Di-n-octylphthalate	117-84-0	8.0	J	6.6	20	1
10138	Phenanthrene	85-01-8	0.73	U	0.73	1.8	1
10138	Pyrene	129-00-0	0.73	U	0.73	1.8	1
	Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6	1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9	1
10225	PCB-1221	11104-28-2	0.55	U	0.55	1.9	1
10225	PCB-1232	11141-16-5	0.57	U	0.57	1.9	1
10225	PCB-1242	53469-21-9	0.55	U	0.55	1.9	1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9	1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9	1
10225	PCB-1260	11096-82-5	0.36	U	0.36	1.9	1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9	1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	15,400		5.47	21.7	1
07914	Boron	7440-42-8	4.84	U	4.84	27.2	5
	Reporting limits for boron were raised due to interference from the sample matrix.						
01650	Calcium	7440-70-2	4,880		6.66	21.7	1
01654	Iron	7439-89-6	28,500		5.12	21.7	1
01656	Lithium	7439-93-2	27.7		0.24	2.2	1
01657	Magnesium	7439-95-4	5,630		2.76	10.9	1
06958	Manganese	7439-96-5	336		0.0848	0.543	1
10145	Phosphorus	7723-14-0	480		0.609	10.9	1
01662	Potassium	7440-09-7	1,550		19.6	54.3	1
01667	Sodium	7440-23-5	106	J	40.5	109	1
07968	Strontium	7440-24-6	20.7		0.0674	0.543	1
06969	Tin	7440-31-5	2.59	J	1.09	10.9	1
06970	Titanium	7440-32-6	1,130		0.413	1.09	1
10146	Zirconium	7440-67-7	1.69	J	0.913	5.43	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.141	J	0.0633	0.211	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL120 SDG#: DE060-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06125	Arsenic	7440-38-2	8.15	0.0844	0.422	2
06126	Barium	7440-39-3	93.0	0.114	0.422	2
06127	Beryllium	7440-41-7	1.01	0.0169	0.106	2
06128	Cadmium	7440-43-9	0.0802 J	0.0422	0.106	2
06131	Chromium	7440-47-3	24.7	0.127	0.422	2
06132	Cobalt	7440-48-4	11.3	0.0211	0.106	2
06133	Copper	7440-50-8	16.9	0.0697	0.422	2
06135	Lead	7439-92-1	9.45	0.0110	0.211	2
06138	Molybdenum	7439-98-7	0.414	0.0528	0.106	2
06139	Nickel	7440-02-0	15.3	0.106	0.422	2
06141	Selenium	7782-49-2	0.121 J	0.0422	0.422	2
06142	Silver	7440-22-4	0.0158 J	0.0127	0.106	2
06145	Thallium	7440-28-0	0.280	0.0317	0.106	2
06148	Vanadium	7440-62-2	46.4	0.0232	0.106	2
06149	Zinc	7440-66-6	75.1	0.591	3.17	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0050 J	0.0030	0.106	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.6	0.88	1.1	1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	32.9	1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.86 J	0.22	1.1	1
	ASTM D1498		**mV**	**mV**	**mV**	
01821	32a OR Potential	n.a.	343	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.49	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	8.9	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL120 SDG#: DE060-08

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-120-SA5B-SB-3.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/17/2011 23:58	Laura M Krieger	0.98
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 17:39	Jason M Long	23.72
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:04	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 15:04	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 13:13	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 14:53	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/27/2011 20:21	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/24/2011 13:04	Eric L Eby	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 21:02	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 21:02	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:44	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183553
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL120 SDG#: DE060-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:44	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:44	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:44	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:07	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 12:28	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/24/2011 23:42	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 18:14	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL119 SDG#: DE060-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
06192	Acetone	67-64-1	7.7	U	7.7	9.2	1.02
06192	Benzene	71-43-2	0.11	U	0.11	4.6	1.02
06192	Bromobenzene	108-86-1	0.15	U	0.15	4.6	1.02
06192	Bromochloromethane	74-97-5	0.38	U	0.38	4.6	1.02
06192	Bromodichloromethane	75-27-4	0.09	U	0.09	4.6	1.02
06192	Bromoform	75-25-2	0.46	U	0.46	4.6	1.02
06192	Bromomethane	74-83-9	0.29	U	0.29	4.6	1.02
06192	2-Butanone	78-93-3	1.4	U	1.4	9.2	1.02
06192	n-Butylbenzene	104-51-8	0.14	U	0.14	4.6	1.02
06192	sec-Butylbenzene	135-98-8	0.07	U	0.07	4.6	1.02
06192	tert-Butylbenzene	98-06-6	0.18	U	0.18	4.6	1.02
06192	Carbon Tetrachloride	56-23-5	0.16	U	0.16	4.6	1.02
06192	Chlorobenzene	108-90-7	0.13	U	0.13	4.6	1.02
06192	Chloroethane	75-00-3	0.15	U	0.15	4.6	1.02
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.35	U	0.35	4.6	1.02
06192	Chloroform	67-66-3	0.14	U	0.14	4.6	1.02
06192	Chloromethane	74-87-3	0.38	U	0.38	4.6	1.02
06192	2-Chlorotoluene	95-49-8	0.16	U	0.16	4.6	1.02
06192	4-Chlorotoluene	106-43-4	0.16	U	0.16	4.6	1.02
06192	Chlorotrifluoroethene	79-38-9	0.58	U	0.58	5.8	1.02
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.81	U	0.81	4.6	1.02
06192	Dibromochloromethane	124-48-1	0.23	U	0.23	4.6	1.02
06192	1,2-Dibromoethane	106-93-4	0.20	U	0.20	4.6	1.02
06192	Dibromomethane	74-95-3	0.28	U	0.28	4.6	1.02
06192	1,2-Dichlorobenzene	95-50-1	0.10	U	0.10	4.6	1.02
06192	1,3-Dichlorobenzene	541-73-1	0.14	U	0.14	4.6	1.02
06192	1,4-Dichlorobenzene	106-46-7	0.18	U	0.18	4.6	1.02
06192	Dichlorodifluoromethane	75-71-8	0.14	U	0.14	4.6	1.02
06192	1,1-Dichloroethane	75-34-3	0.11	U	0.11	4.6	1.02
06192	1,2-Dichloroethane	107-06-2	0.17	U	0.17	4.6	1.02
06192	1,1-Dichloroethene	75-35-4	0.45	U	0.45	4.6	1.02
06192	cis-1,2-Dichloroethene	156-59-2	0.22	U	0.22	4.6	1.02
06192	trans-1,2-Dichloroethene	156-60-5	0.14	U	0.14	4.6	1.02
06192	1,2-Dichloropropane	78-87-5	0.20	U	0.20	4.6	1.02
06192	1,3-Dichloropropane	142-28-9	0.09	U	0.09	4.6	1.02
06192	2,2-Dichloropropane	594-20-7	0.20	U	0.20	4.6	1.02
06192	1,1-Dichloropropene	563-58-6	0.15	U	0.15	4.6	1.02
06192	cis-1,3-Dichloropropene	10061-01-5	0.18	U	0.18	4.6	1.02
06192	trans-1,3-Dichloropropene	10061-02-6	0.20	U	0.20	4.6	1.02
06192	Ethylbenzene	100-41-4	0.07	U	0.07	4.6	1.02
06192	Freon 113	76-13-1	0.13	U	0.13	4.6	1.02
06192	Freon 133a	75-88-7	0.58	U	0.58	5.8	1.02
06192	Hexachlorobutadiene	87-68-3	0.16	U	0.16	4.6	1.02
06192	2-Hexanone	591-78-6	1.8	U	1.8	9.2	1.02
06192	Isopropylbenzene	98-82-8	0.07	U	0.07	4.6	1.02
06192	p-Isopropyltoluene	99-87-6	0.13	U	0.13	4.6	1.02
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.24	U	0.24	4.6	1.02
06192	4-Methyl-2-pentanone	108-10-1	0.45	U	0.45	9.2	1.02
06192	Methylene Chloride	75-09-2	0.70	J	0.28	4.6	1.02
06192	n-Propylbenzene	103-65-1	0.08	U	0.08	4.6	1.02

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL119 SDG#: DE060-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.11	U	0.11	4.6	1.02
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.13	U	0.13	4.6	1.02
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.26	U	0.26	4.6	1.02
06192	Tetrachloroethene	127-18-4	0.23	U	0.23	4.6	1.02
06192	Toluene	108-88-3	0.1	J	0.09	4.6	1.02
06192	1,2,3-Trichlorobenzene	87-61-6	0.16	U	0.16	4.6	1.02
06192	1,2,4-Trichlorobenzene	120-82-1	0.21	U	0.21	4.6	1.02
06192	1,1,1-Trichloroethane	71-55-6	0.23	U	0.23	4.6	1.02
06192	1,1,2-Trichloroethane	79-00-5	0.31	U	0.31	4.6	1.02
06192	Trichloroethene	79-01-6	0.17	U	0.17	4.6	1.02
06192	Trichlorofluoromethane	75-69-4	0.33	U	0.33	4.6	1.02
06192	1,2,3-Trichloropropane	96-18-4	0.38	U	0.38	4.6	1.02
06192	1,2,4-Trimethylbenzene	95-63-6	0.46	U	0.46	4.6	1.02
06192	1,3,5-Trimethylbenzene	108-67-8	0.11	U	0.11	4.6	1.02
06192	Vinyl Chloride	75-01-4	0.23	U	0.23	4.6	1.02
06192	m+p-Xylene	179601-23-1	0.20	U	0.20	4.6	1.02
06192	o-Xylene	95-47-6	0.20	U	0.20	4.6	1.02
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.8	U	5.8	17	25.72
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	560	1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800	1
04688	Benzoic acid	65-85-0	190	U	190	560	1
04688	Benzyl alcohol	100-51-6	190	U	190	560	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190	1
04688	4-Chloroaniline	106-47-8	75	U	75	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190	1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560	1
04688	2,4-Dinitrophenol	51-28-5	750	U	750	2,300	1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL119 SDG#: DE060-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	32	J	19	380	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	38	U	38	190	1
04688	4-Methylphenol	106-44-5	38	U	38	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	38	U	38	190	1
04688	4-Nitroaniline	100-01-6	75	U	75	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	560	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	560	1
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190	1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190	1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg		ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.75	U	0.75	1.9	1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9	1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.75	U	0.75	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.75	U	0.75	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.75	U	0.75	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.75	U	0.75	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.75	U	0.75	1.9	1
10138	Butylbenzylphthalate	85-68-7	6.8	U	6.8	20	1
10138	Di-n-butylphthalate	84-74-2	6.8	U	6.8	20	1
10138	Chrysene	218-01-9	0.38	U	0.38	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.75	U	0.75	1.9	1
10138	Diethylphthalate	84-66-2	6.8	U	6.8	20	1
10138	Dimethylphthalate	131-11-3	6.8	U	6.8	20	1
10138	Fluoranthene	206-44-0	0.75	U	0.75	1.9	1
10138	Fluorene	86-73-7	0.75	U	0.75	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	U	0.75	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.75	U	0.75	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL119 SDG#: DE060-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	0.75	U	0.75	1.9	1
10138	Naphthalene	91-20-3	0.75	U	0.75	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.75	U	0.75	1.9	1
10138	Di-n-octylphthalate	117-84-0	8.3	J	6.8	20	1
10138	Phenanthrene	85-01-8	0.75	U	0.75	1.9	1
10138	Pyrene	129-00-0	0.75	U	0.75	1.9	1
	Di-n-octylphthalate was detected in the method blank at a concentration of 7.7 ug/kg. The blank value was not subtracted from the analytical result.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7	1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7	1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7	1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9	1
10225	PCB-1221	11104-28-2	0.56	U	0.56	1.9	1
10225	PCB-1232	11141-16-5	0.59	U	0.59	1.9	1
10225	PCB-1242	53469-21-9	0.56	U	0.56	1.9	1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9	1
10225	PCB-1254	11097-69-1	0.37	U	0.37	1.9	1
10225	PCB-1260	11096-82-5	0.37	U	0.37	1.9	1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9	1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	19,100		5.55	22.1	1
07914	Boron	7440-42-8	4.91	U	4.91	27.6	5
	Reporting limits for boron were raised due to interference from the sample matrix.						
01650	Calcium	7440-70-2	3,340		6.77	22.1	1
01654	Iron	7439-89-6	28,900		5.20	22.1	1
01656	Lithium	7439-93-2	27.4		0.24	2.2	1
01657	Magnesium	7439-95-4	6,060		2.80	11.0	1
06958	Manganese	7439-96-5	259		0.0861	0.552	1
10145	Phosphorus	7723-14-0	243		0.618	11.0	1
01662	Potassium	7440-09-7	1,720		19.9	55.2	1
01667	Sodium	7440-23-5	138		41.2	110	1
07968	Strontium	7440-24-6	23.9		0.0685	0.552	1
06969	Tin	7440-31-5	2.82	J	1.10	11.0	1
06970	Titanium	7440-32-6	1,300		0.420	1.10	1
10146	Zirconium	7440-67-7	1.43	J	0.927	5.52	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.108	J	0.0676	0.225	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL119 SDG#: DE060-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06125	Arsenic	7440-38-2	5.10	0.0901	0.450	2
06126	Barium	7440-39-3	88.1	0.122	0.450	2
06127	Beryllium	7440-41-7	0.592	0.0180	0.113	2
06128	Cadmium	7440-43-9	0.0458 J	0.0450	0.113	2
06131	Chromium	7440-47-3	22.3	0.135	0.450	2
06132	Cobalt	7440-48-4	6.21	0.0225	0.113	2
06133	Copper	7440-50-8	7.92	0.0743	0.450	2
06135	Lead	7439-92-1	6.69	0.0117	0.225	2
06138	Molybdenum	7439-98-7	0.338	0.0563	0.113	2
06139	Nickel	7440-02-0	11.6	0.113	0.450	2
06141	Selenium	7782-49-2	0.0987 J	0.0450	0.450	2
06142	Silver	7440-22-4	0.0135 U	0.0135	0.113	2
06145	Thallium	7440-28-0	0.193	0.0338	0.113	2
06148	Vanadium	7440-62-2	41.2	0.0248	0.113	2
06149	Zinc	7440-66-6	48.7	0.631	3.38	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.110	1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.5	0.90	1.1	1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1 U	10.1	33.8	1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.1	1
	ASTM D1498		**mV**	**mV**	**mV**	
01821	32a OR Potential	n.a.	358	10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.					
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.01	0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.					

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL119 SDG#: DE060-09

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-119-SA5B-SB-3.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/18/2011 00:21	Laura M Krieger	1.02
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 17:59	Jason M Long	25.72
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:07	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 15:07	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/22/2011 13:38	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 15:26	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/27/2011 20:40	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/24/2011 13:07	Eric L Eby	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 21:06	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 21:06	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:48	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183554
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL119 SDG#: DE060-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:48	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:48	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:48	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:08	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 12:40	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/25/2011 00:05	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11025243202A	01/29/2011 18:20	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD009 SDG#: DE060-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	220	U	220	650	1
04688	Benzidine	92-87-5	1,500	U	1,500	4,400	1
04688	Benzoic acid	65-85-0	220	U	220	650	1
04688	Benzyl alcohol	100-51-6	220	U	220	650	1
04688	4-Bromophenyl-phenylether	101-55-3	22	U	22	220	1
04688	Carbazole	86-74-8	22	U	22	220	1
04688	4-Chloro-3-methylphenol	59-50-7	44	U	44	220	1
04688	4-Chloroaniline	106-47-8	87	U	87	220	1
04688	bis(2-Chloroethoxy)methane	111-91-1	22	U	22	220	1
04688	bis(2-Chloroethyl)ether	111-44-4	22	U	22	220	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	22	U	22	220	1
04688	2-Chloronaphthalene	91-58-7	22	U	22	220	1
04688	2-Chlorophenol	95-57-8	22	U	22	220	1
04688	4-Chlorophenyl-phenylether	7005-72-3	44	U	44	220	1
04688	Dibenzofuran	132-64-9	22	U	22	220	1
04688	1,2-Dichlorobenzene	95-50-1	22	U	22	220	1
04688	1,3-Dichlorobenzene	541-73-1	22	U	22	220	1
04688	1,4-Dichlorobenzene	106-46-7	22	U	22	220	1
04688	3,3'-Dichlorobenzidine	91-94-1	130	U	130	440	1
04688	2,4-Dichlorophenol	120-83-2	22	U	22	220	1
04688	2,4-Dimethylphenol	105-67-9	44	U	44	220	1
04688	3,5-Dimethylphenol	108-68-9	44	U	44	220	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	220	U	220	650	1
04688	2,4-Dinitrophenol	51-28-5	870	U	870	1,300	1
04688	2,4-Dinitrotoluene	121-14-2	44	U	44	220	1
04688	2,6-Dinitrotoluene	606-20-2	22	U	22	220	1
04688	1,2-Diphenylhydrazine	122-66-7	22	U	22	220	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	39	J	22	440	1
04688	Hexachlorobenzene	118-74-1	22	U	22	220	1
04688	Hexachlorobutadiene	87-68-3	87	U	87	220	1
04688	Hexachlorocyclopentadiene	77-47-4	220	U	220	650	1
04688	Hexachloroethane	67-72-1	22	U	22	220	1
04688	Isophorone	78-59-1	22	U	22	220	1
04688	2-Methylphenol	95-48-7	44	U	44	220	1
04688	4-Methylphenol	106-44-5	44	U	44	220	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	22	U	22	220	1
04688	3-Nitroaniline	99-09-2	44	U	44	220	1
04688	4-Nitroaniline	100-01-6	87	U	87	220	1
04688	Nitrobenzene	98-95-3	22	U	22	220	1
04688	2-Nitrophenol	88-75-5	22	U	22	220	1
04688	4-Nitrophenol	100-02-7	220	U	220	650	1
04688	N-Nitroso-di-n-propylamine	621-64-7	22	U	22	220	1
04688	N-Nitrosodiphenylamine	86-30-6	22	U	22	220	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	220	U	220	650	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD009 SDG#: DE060-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	22	U	22	220	1
04688	1,2,4-Trichlorobenzene	120-82-1	22	U	22	220	1
04688	2,4,5-Trichlorophenol	95-95-4	44	U	44	220	1
04688	2,4,6-Trichlorophenol	88-06-2	44	U	44	220	1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.87	U	0.87	2.2	1
10138	Acenaphthylene	208-96-8	0.44	U	0.44	2.2	1
10138	Anthracene	120-12-7	0.44	U	0.44	2.2	1
10138	Benzo(a)anthracene	56-55-3	0.87	U	0.87	2.2	1
10138	Benzo(a)pyrene	50-32-8	4.5		0.87	2.2	1
10138	Benzo(b)fluoranthene	205-99-2	49		0.87	2.2	1
10138	Benzo(g,h,i)perylene	191-24-2	1.5	J	0.87	2.2	1
10138	Benzo(k)fluoranthene	207-08-9	0.87	U	0.87	2.2	1
10138	Butylbenzylphthalate	85-68-7	11	J	7.8	24	1
10138	Di-n-butylphthalate	84-74-2	7.8	U	7.8	24	1
10138	Chrysene	218-01-9	3.0		0.44	2.2	1
10138	Dibenz(a,h)anthracene	53-70-3	0.87	U	0.87	2.2	1
10138	Diethylphthalate	84-66-2	7.8	U	7.8	24	1
10138	Dimethylphthalate	131-11-3	7.8	U	7.8	24	1
10138	Fluoranthene	206-44-0	3.3		0.87	2.2	1
10138	Fluorene	86-73-7	5.8		0.87	2.2	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.1	J	0.87	2.2	1
10138	1-Methylnaphthalene	90-12-0	0.87	U	0.87	2.2	1
10138	2-Methylnaphthalene	91-57-6	0.87	U	0.87	2.2	1
10138	Naphthalene	91-20-3	1.0	J	0.87	2.2	1
10138	N-Nitrosodimethylamine	62-75-9	0.87	U	0.87	2.2	1
10138	Di-n-octylphthalate	117-84-0	7.8	U	7.8	24	1
10138	Phenanthrene	85-01-8	1.4	J	0.87	2.2	1
10138	Pyrene	129-00-0	3.6		0.87	2.2	1

The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	3.0	U	3.0	4.7	1
10401	Dalapon	75-99-0	5.8	U	5.8	12	1
10401	2,4-DB	94-82-6	3.5	U	3.5	3.5	1
10401	Dicamba	1918-00-9	0.52	U	0.52	1.6	1
10401	Dinoseb	88-85-7	1.0	U	1.0	3.1	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.0	U	1.0	2.2	1
10401	MCPA	94-74-6	1,700	U	1,700	1,700	1
10401	MCPP (Mecoprop)	93-65-2	340	U	340	340	1
10401	2,4,5-T	93-76-5	0.11	U	0.11	0.22	1
10401	2,4,5-TP	93-72-1	0.098	U	0.098	0.22	1

MCPP was detected in the method blank at a concentration of 97.15 ug/kg. MCPP was also detected in the sample at a concentration

*=This limit was used in the evaluation of the final result

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD009 SDG#: DE060-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	of 298.34 ug/kg, however, the reporting limits are raised in the sample due to an interfering peak on the confirmation column. MCPP was not detected in the reextracted blank or sample. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract.						
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
	Due to interfering peaks on the chromatogram, the values reported for various compounds represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.086	U	0.086	0.22	1
01363	Alpha BHC	319-84-6	0.044	U	0.044	0.22	1
01363	Beta BHC	319-85-7	0.078	U	0.078	0.22	1
01363	Gamma BHC - Lindane	58-89-9	0.044	U	0.044	0.22	1
01363	Chlordane	57-74-9	3.0	U	3.0	4.4	1
01363	p,p-DDD	72-54-8	0.34	U	0.34	0.44	1
01363	p,p-DDE	72-55-9	1.5	U	1.5	1.5	1
01363	p,p-DDT	50-29-3	1.9	U	1.9	1.9	1
01363	Delta BHC	319-86-8	0.047	U	0.047	0.22	1
01363	Dieldrin	60-57-1	0.086	U	0.086	0.44	1
01363	Endosulfan I	959-98-8	0.058	U	0.058	0.22	1
01363	Endosulfan II	33213-65-9	0.34	U	0.34	0.44	1
01363	Endosulfan Sulfate	1031-07-8	0.086	U	0.086	0.44	1
01363	Endrin	72-20-8	0.086	U	0.086	0.44	1
01363	Endrin Aldehyde	7421-93-4	0.54	U	0.54	0.54	1
01363	Endrin Ketone	53494-70-5	0.38	U	0.38	0.44	1
01363	Heptachlor	76-44-8	0.26	U	0.26	0.26	1
01363	Heptachlor Epoxide	1024-57-3	0.044	U	0.044	0.22	1
01363	Methoxychlor	72-43-5	0.44	U	0.44	2.2	1
01363	Mirex	2385-85-5	0.086	U	0.086	0.44	1
01363	Toxaphene	8001-35-2	2.9	U	2.9	8.6	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained. The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.3	U	1.3	4.3	1
10225	Aroclor 5442	12642-23-8	1.3	U	1.3	4.3	1
10225	Aroclor 5460	11126-42-4	3.0	J	1.3	4.3	1
10225	PCB-1016	12674-11-2	0.43	U	0.43	2.2	1
10225	PCB-1221	11104-28-2	0.65	U	0.65	2.2	1
10225	PCB-1232	11141-16-5	0.68	U	0.68	2.2	1
10225	PCB-1242	53469-21-9	0.65	U	0.65	2.2	1
10225	PCB-1248	12672-29-6	0.43	U	0.43	2.2	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD009 SDG#: DE060-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	PCB-1254	11097-69-1	3.7		0.43	2.2	1
10225	PCB-1260	11096-82-5	3.3		0.43	2.2	1
10225	PCB-1262	37324-23-5	0.43	U	0.43	2.2	1
10225	PCB-1268	11100-14-4	0.43	U	0.43	2.2	1
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,700		6.58	26.1	1
07914	Boron	7440-42-8	1.16	U	1.16	6.54	1
01650	Calcium	7440-70-2	8,140		8.01	26.1	1
01654	Iron	7439-89-6	19,800		6.16	26.1	1
01656	Lithium	7439-93-2	26.2		0.29	2.6	1
01657	Magnesium	7439-95-4	5,720		3.32	13.1	1
06958	Manganese	7439-96-5	306		0.102	0.654	1
10145	Phosphorus	7723-14-0	474		0.732	13.1	1
01662	Potassium	7440-09-7	3,270		23.5	65.4	1
01667	Sodium	7440-23-5	64.0	J	48.8	131	1
07968	Strontium	7440-24-6	22.9		0.0810	0.654	1
06969	Tin	7440-31-5	2.74	J	1.31	13.1	1
06970	Titanium	7440-32-6	997		0.497	1.31	1
10146	Zirconium	7440-67-7	1.10	U	1.10	6.54	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.118	J	0.0761	0.254	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	37.9		0.102	0.508	2
06126	Barium	7440-39-3	69.6		0.137	0.508	2
06127	Beryllium	7440-41-7	0.549		0.0203	0.127	2
06128	Cadmium	7440-43-9	0.211		0.0508	0.127	2
06131	Chromium	7440-47-3	19.1		0.152	0.508	2
06132	Cobalt	7440-48-4	6.53		0.0254	0.127	2
06133	Copper	7440-50-8	11.2		0.0838	0.508	2
06135	Lead	7439-92-1	12.8		0.0132	0.254	2
06138	Molybdenum	7439-98-7	0.435		0.0635	0.127	2
06139	Nickel	7440-02-0	14.7		0.127	0.508	2
06141	Selenium	7782-49-2	0.179	J	0.0508	0.508	2
06142	Silver	7440-22-4	0.0798	J	0.0152	0.127	2
06145	Thallium	7440-28-0	0.323		0.0381	0.127	2
06148	Vanadium	7440-62-2	32.4		0.0279	0.127	2
06149	Zinc	7440-66-6	57.9		0.711	3.81	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0220	J	0.0036	0.127	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD009 SDG#: DE060-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8		1.0	1.3	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	11.8	U	11.8	39.2	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.26	U	0.26	1.3	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	32a OR Potential	n.a.	391		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.15		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	23.5		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/27/2011 09:14	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 15:58	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110190027A	02/02/2011 11:27	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	110170031A	02/03/2011 07:41	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/27/2011 20:58	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	110170031A	01/18/2011 08:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD009 SDG#: DE060-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110190027A	01/20/2011 08:45	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 21:10	John P Hook	1
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 21:10	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 21:10	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 16:51	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 16:51	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 16:51	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 16:51	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:10	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203A	01/27/2011 12:52	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/25/2011 00:28	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11025243202A	01/29/2011 18:32	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203A	01/25/2011 23:40	Venia B McFadden	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183555
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD009 SDG#: DE060-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD028 SDG#: DE060-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	Aniline	62-53-3	240	U	240	710	1
04688	Benzidine	92-87-5	1,700	U	1,700	4,700	1
04688	Benzoic acid	65-85-0	240	U	240	710	1
04688	Benzyl alcohol	100-51-6	240	U	240	710	1
04688	4-Bromophenyl-phenylether	101-55-3	24	U	24	240	1
04688	Carbazole	86-74-8	24	U	24	240	1
04688	4-Chloro-3-methylphenol	59-50-7	47	U	47	240	1
04688	4-Chloroaniline	106-47-8	94	U	94	240	1
04688	bis(2-Chloroethoxy)methane	111-91-1	24	U	24	240	1
04688	bis(2-Chloroethyl)ether	111-44-4	24	U	24	240	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	24	U	24	240	1
04688	2-Chloronaphthalene	91-58-7	24	U	24	240	1
04688	2-Chlorophenol	95-57-8	24	U	24	240	1
04688	4-Chlorophenyl-phenylether	7005-72-3	47	U	47	240	1
04688	Dibenzofuran	132-64-9	24	U	24	240	1
04688	1,2-Dichlorobenzene	95-50-1	24	U	24	240	1
04688	1,3-Dichlorobenzene	541-73-1	24	U	24	240	1
04688	1,4-Dichlorobenzene	106-46-7	24	U	24	240	1
04688	3,3'-Dichlorobenzidine	91-94-1	140	U	140	470	1
04688	2,4-Dichlorophenol	120-83-2	24	U	24	240	1
04688	2,4-Dimethylphenol	105-67-9	47	U	47	240	1
04688	3,5-Dimethylphenol	108-68-9	47	U	47	240	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	240	U	240	710	1
04688	2,4-Dinitrophenol	51-28-5	940	U	940	1,400	1
04688	2,4-Dinitrotoluene	121-14-2	47	U	47	240	1
04688	2,6-Dinitrotoluene	606-20-2	24	U	24	240	1
04688	1,2-Diphenylhydrazine	122-66-7	24	U	24	240	1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	35	J	24	470	1
04688	Hexachlorobenzene	118-74-1	24	U	24	240	1
04688	Hexachlorobutadiene	87-68-3	94	U	94	240	1
04688	Hexachlorocyclopentadiene	77-47-4	240	U	240	710	1
04688	Hexachloroethane	67-72-1	24	U	24	240	1
04688	Isophorone	78-59-1	24	U	24	240	1
04688	2-Methylphenol	95-48-7	47	U	47	240	1
04688	4-Methylphenol	106-44-5	47	U	47	240	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	24	U	24	240	1
04688	3-Nitroaniline	99-09-2	47	U	47	240	1
04688	4-Nitroaniline	100-01-6	94	U	94	240	1
04688	Nitrobenzene	98-95-3	24	U	24	240	1
04688	2-Nitrophenol	88-75-5	24	U	24	240	1
04688	4-Nitrophenol	100-02-7	240	U	240	710	1
04688	N-Nitroso-di-n-propylamine	621-64-7	24	U	24	240	1
04688	N-Nitrosodiphenylamine	86-30-6	24	U	24	240	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	240	U	240	710	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD028 SDG#: DE060-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Phenol	108-95-2	24	U	24	240	1
04688	1,2,4-Trichlorobenzene	120-82-1	24	U	24	240	1
04688	2,4,5-Trichlorophenol	95-95-4	47	U	47	240	1
04688	2,4,6-Trichlorophenol	88-06-2	47	U	47	240	1

Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.

GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.94	U	0.94	2.4	1
10138	Acenaphthylene	208-96-8	0.47	U	0.47	2.4	1
10138	Anthracene	120-12-7	0.47	U	0.47	2.4	1
10138	Benzo(a)anthracene	56-55-3	0.94	U	0.94	2.4	1
10138	Benzo(a)pyrene	50-32-8	1.4	J	0.94	2.4	1
10138	Benzo(b)fluoranthene	205-99-2	25		0.94	2.4	1
10138	Benzo(g,h,i)perylene	191-24-2	0.94	U	0.94	2.4	1
10138	Benzo(k)fluoranthene	207-08-9	0.94	U	0.94	2.4	1
10138	Butylbenzylphthalate	85-68-7	8.5	U	8.5	25	1
10138	Di-n-butylphthalate	84-74-2	8.5	U	8.5	25	1
10138	Chrysene	218-01-9	0.93	J	0.47	2.4	1
10138	Dibenz(a,h)anthracene	53-70-3	0.94	U	0.94	2.4	1
10138	Diethylphthalate	84-66-2	8.5	U	8.5	25	1
10138	Dimethylphthalate	131-11-3	8.5	U	8.5	25	1
10138	Fluoranthene	206-44-0	1.3	J	0.94	2.4	1
10138	Fluorene	86-73-7	4.4		0.94	2.4	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.94	U	0.94	2.4	1
10138	1-Methylnaphthalene	90-12-0	0.94	U	0.94	2.4	1
10138	2-Methylnaphthalene	91-57-6	0.94	U	0.94	2.4	1
10138	Naphthalene	91-20-3	1.2	J	0.94	2.4	1
10138	N-Nitrosodimethylamine	62-75-9	0.94	U	0.94	2.4	1
10138	Di-n-octylphthalate	117-84-0	8.5	U	8.5	25	1
10138	Phenanthrene	85-01-8	1.2	J	0.94	2.4	1
10138	Pyrene	129-00-0	0.94	U	0.94	2.4	1

The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.7	U	1.7	5.1	1
10401	Dalapon	75-99-0	6.2	U	6.2	13	1
10401	2,4-DB	94-82-6	3.8		0.88	2.4	1
10401	Dicamba	1918-00-9	0.57	U	0.57	1.7	1
10401	Dinoseb	88-85-7	1.1	U	1.1	3.4	1
10401	2,4-DP (Dichlorprop)	120-36-5	1.1	U	1.1	2.4	1
10401	MCPA	94-74-6	450	U	450	450	1
10401	MCPP (Mecoprop)	93-65-2	570	U	570	570	1
10401	2,4,5-T	93-76-5	0.12	U	0.12	0.24	1
10401	2,4,5-TP	93-72-1	0.11	U	0.11	0.24	1

MCPP was detected in the method blank at a concentration of 97.15 ug/kg. MCPP was also detected in the sample at a concentration

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD028 SDG#: DE060-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	of 488.92 ug/kg, however, the reporting limits are raised in the sample due to an interfering peak on the confirmation column. MCPP was not detected in the reextracted blank or sample. The hold time had expired prior to the reextraction therefore, all results are reported from the original extract.						
	The recovery for Dinoseb is outside the QC limits. However, this compound does not recover well with this method. Since the recovery is within our laboratory statistical limits of 0-36%, the data is reported.						
	Due to interfering peaks on the chromatogram, the values reported for MCPP and MCPA represent the lowest reporting limits attainable.						
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.093	U	0.093	0.24	1
01363	Alpha BHC	319-84-6	0.048	U	0.048	0.24	1
01363	Beta BHC	319-85-7	0.085	U	0.085	0.24	1
01363	Gamma BHC - Lindane	58-89-9	0.048	U	0.048	0.24	1
01363	Chlordane	57-74-9	1.1	U	1.1	4.8	1
01363	p,p-DDD	72-54-8	0.12	U	0.12	0.48	1
01363	p,p-DDE	72-55-9	0.17	U	0.17	0.48	1
01363	p,p-DDT	50-29-3	0.31	U	0.31	0.48	1
01363	Delta BHC	319-86-8	0.051	U	0.051	0.24	1
01363	Dieldrin	60-57-1	0.093	U	0.093	0.48	1
01363	Endosulfan I	959-98-8	0.062	U	0.062	0.24	1
01363	Endosulfan II	33213-65-9	0.093	U	0.093	0.48	1
01363	Endosulfan Sulfate	1031-07-8	0.093	U	0.093	0.48	1
01363	Endrin	72-20-8	0.093	U	0.093	0.48	1
01363	Endrin Aldehyde	7421-93-4	0.093	U	0.093	0.48	1
01363	Endrin Ketone	53494-70-5	0.093	U	0.093	0.48	1
01363	Heptachlor	76-44-8	0.085	U	0.085	0.24	1
01363	Heptachlor Epoxide	1024-57-3	0.048	U	0.048	0.24	1
01363	Methoxychlor	72-43-5	0.64	U	0.64	2.4	1
01363	Mirex	2385-85-5	0.093	U	0.093	0.48	1
01363	Toxaphene	8001-35-2	3.1	U	3.1	9.3	1
	Various analytes in the calibration check standards bracketing the sample were outside the acceptance criteria. This effect is attributed to the sample matrix based on our experience with the site, and the data is reported. Due to interfering peaks on the chromatogram from the presence of PCBs, the values reported represent the lowest reporting limits attainable. Despite numerous cleanup methods, our usual reporting limits were not attained.						
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.4	U	1.4	4.7	1
10225	Aroclor 5442	12642-23-8	1.4	U	1.4	4.7	1
10225	Aroclor 5460	11126-42-4	1.4	U	1.4	4.7	1
10225	PCB-1016	12674-11-2	0.47	U	0.47	2.4	1
10225	PCB-1221	11104-28-2	0.71	U	0.71	2.4	1
10225	PCB-1232	11141-16-5	0.74	U	0.74	2.4	1
10225	PCB-1242	53469-21-9	0.71	U	0.71	2.4	1
10225	PCB-1248	12672-29-6	0.47	U	0.47	2.4	1
10225	PCB-1254	11097-69-1	1.5	J	0.47	2.4	1
10225	PCB-1260	11096-82-5	0.47	U	0.47	2.4	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD028 SDG#: DE060-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	PCB-1262	37324-23-5	0.47	U	0.47	2.4	1
10225	PCB-1268	11100-14-4	0.47	U	0.47	2.4	1
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.						
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	9,630		6.92	27.5	1
07914	Boron	7440-42-8	1.22	U	1.22	6.88	1
01650	Calcium	7440-70-2	3,900		8.43	27.5	1
01654	Iron	7439-89-6	18,800		6.48	27.5	1
01656	Lithium	7439-93-2	22.6		0.30	2.8	1
01657	Magnesium	7439-95-4	4,850		3.49	13.8	1
06958	Manganese	7439-96-5	246		0.107	0.688	1
10145	Phosphorus	7723-14-0	478		0.770	13.8	1
01662	Potassium	7440-09-7	2,750		24.8	68.8	1
01667	Sodium	7440-23-5	65.7	J	51.3	138	1
07968	Strontium	7440-24-6	12.0		0.0853	0.688	1
06969	Tin	7440-31-5	2.53	J	1.38	13.8	1
06970	Titanium	7440-32-6	1,070		0.523	1.38	1
10146	Zirconium	7440-67-7	2.10	J	1.16	6.88	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.0833	U	0.0833	0.278	2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	2.87		0.111	0.555	2
06126	Barium	7440-39-3	64.4		0.150	0.555	2
06127	Beryllium	7440-41-7	0.365		0.0222	0.139	2
06128	Cadmium	7440-43-9	0.208		0.0555	0.139	2
06131	Chromium	7440-47-3	15.9		0.167	0.555	2
06132	Cobalt	7440-48-4	5.06		0.0278	0.139	2
06133	Copper	7440-50-8	6.44		0.0917	0.555	2
06135	Lead	7439-92-1	6.77		0.0144	0.278	2
06138	Molybdenum	7439-98-7	0.291		0.0694	0.139	2
06139	Nickel	7440-02-0	9.52		0.139	0.555	2
06141	Selenium	7782-49-2	0.124	J	0.0555	0.555	2
06142	Silver	7440-22-4	0.0370	J	0.0167	0.139	2
06145	Thallium	7440-28-0	0.191		0.0417	0.139	2
06148	Vanadium	7440-62-2	32.6		0.0306	0.139	2
06149	Zinc	7440-66-6	52.6		0.778	4.17	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0904	J	0.0040	0.140	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD028 SDG#: DE060-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0		1.1	1.4	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	12.7	U	12.7	42.5	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.29	J	0.28	1.4	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	32a OR Potential	n.a.	409		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	7.41		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	29.4		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/27/2011 09:40	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 16:30	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	110190027A	02/02/2011 12:50	John W Perkins	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	110170031A	02/03/2011 07:55	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/27/2011 21:17	Lindsey K Lafferty	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	110170031A	01/18/2011 08:30	Kerrie A Freeburn	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD028 SDG#: DE060-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	110190027A	01/20/2011 08:45	Kerrie A Freeburn	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 21:13	John P Hook	1
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
01654	Iron	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 21:13	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 21:13	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 17:00	David K Beck	2
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 17:00	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 17:00	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 17:00	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:11	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203B	01/27/2011 13:05	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/25/2011 00:51	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 18:51	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203B	01/25/2011 23:40	Venia B McFadden	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183556
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD028 SDG#: DE060-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL122 SDG#: DE060-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	
06192	Acetone	67-64-1	7.9	U	7.9	9.4	1.01
06192	Benzene	71-43-2	0.12	U	0.12	4.7	1.01
06192	Bromobenzene	108-86-1	0.15	U	0.15	4.7	1.01
06192	Bromochloromethane	74-97-5	0.39	U	0.39	4.7	1.01
06192	Bromodichloromethane	75-27-4	0.09	U	0.09	4.7	1.01
06192	Bromoform	75-25-2	0.47	U	0.47	4.7	1.01
06192	Bromomethane	74-83-9	0.29	U	0.29	4.7	1.01
06192	2-Butanone	78-93-3	1.4	U	1.4	9.4	1.01
06192	n-Butylbenzene	104-51-8	0.14	U	0.14	4.7	1.01
06192	sec-Butylbenzene	135-98-8	0.07	U	0.07	4.7	1.01
06192	tert-Butylbenzene	98-06-6	0.19	U	0.19	4.7	1.01
06192	Carbon Tetrachloride	56-23-5	0.16	U	0.16	4.7	1.01
06192	Chlorobenzene	108-90-7	0.13	U	0.13	4.7	1.01
06192	Chloroethane	75-00-3	0.15	U	0.15	4.7	1.01
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.35	U	0.35	4.7	1.01
06192	Chloroform	67-66-3	0.14	U	0.14	4.7	1.01
06192	Chloromethane	74-87-3	0.39	U	0.39	4.7	1.01
06192	2-Chlorotoluene	95-49-8	0.16	U	0.16	4.7	1.01
06192	4-Chlorotoluene	106-43-4	0.16	U	0.16	4.7	1.01
06192	Chlorotrifluoroethene	79-38-9	0.59	U	0.59	5.9	1.01
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.82	U	0.82	4.7	1.01
06192	Dibromochloromethane	124-48-1	0.24	U	0.24	4.7	1.01
06192	1,2-Dibromoethane	106-93-4	0.20	U	0.20	4.7	1.01
06192	Dibromomethane	74-95-3	0.28	U	0.28	4.7	1.01
06192	1,2-Dichlorobenzene	95-50-1	0.11	U	0.11	4.7	1.01
06192	1,3-Dichlorobenzene	541-73-1	0.14	U	0.14	4.7	1.01
06192	1,4-Dichlorobenzene	106-46-7	0.19	U	0.19	4.7	1.01
06192	Dichlorodifluoromethane	75-71-8	0.14	U	0.14	4.7	1.01
06192	1,1-Dichloroethane	75-34-3	0.12	U	0.12	4.7	1.01
06192	1,2-Dichloroethane	107-06-2	0.18	U	0.18	4.7	1.01
06192	1,1-Dichloroethene	75-35-4	0.46	U	0.46	4.7	1.01
06192	cis-1,2-Dichloroethene	156-59-2	0.22	U	0.22	4.7	1.01
06192	trans-1,2-Dichloroethene	156-60-5	0.14	U	0.14	4.7	1.01
06192	1,2-Dichloropropane	78-87-5	0.20	U	0.20	4.7	1.01
06192	1,3-Dichloropropane	142-28-9	0.09	U	0.09	4.7	1.01
06192	2,2-Dichloropropane	594-20-7	0.20	U	0.20	4.7	1.01
06192	1,1-Dichloropropene	563-58-6	0.15	U	0.15	4.7	1.01
06192	cis-1,3-Dichloropropene	10061-01-5	0.19	U	0.19	4.7	1.01
06192	trans-1,3-Dichloropropene	10061-02-6	0.20	U	0.20	4.7	1.01
06192	Ethylbenzene	100-41-4	0.07	U	0.07	4.7	1.01
06192	Freon 113	76-13-1	0.13	U	0.13	4.7	1.01
06192	Freon 133a	75-88-7	0.59	U	0.59	5.9	1.01
06192	Hexachlorobutadiene	87-68-3	0.16	U	0.16	4.7	1.01
06192	2-Hexanone	591-78-6	1.9	U	1.9	9.4	1.01
06192	Isopropylbenzene	98-82-8	0.07	U	0.07	4.7	1.01
06192	p-Isopropyltoluene	99-87-6	0.13	U	0.13	4.7	1.01
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.25	U	0.25	4.7	1.01
06192	4-Methyl-2-pentanone	108-10-1	0.46	U	0.46	9.4	1.01
06192	Methylene Chloride	75-09-2	1.4	J	0.28	4.7	1.01
06192	n-Propylbenzene	103-65-1	0.08	U	0.08	4.7	1.01

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL122 SDG#: DE060-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.12	U	0.12	4.7	1.01
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.13	U	0.13	4.7	1.01
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.27	U	0.27	4.7	1.01
06192	Tetrachloroethene	127-18-4	0.24	U	0.24	4.7	1.01
06192	Toluene	108-88-3	0.09	U	0.09	4.7	1.01
06192	1,2,3-Trichlorobenzene	87-61-6	0.16	U	0.16	4.7	1.01
06192	1,2,4-Trichlorobenzene	120-82-1	0.21	U	0.21	4.7	1.01
06192	1,1,1-Trichloroethane	71-55-6	0.24	U	0.24	4.7	1.01
06192	1,1,2-Trichloroethane	79-00-5	0.32	U	0.32	4.7	1.01
06192	Trichloroethene	79-01-6	0.18	U	0.18	4.7	1.01
06192	Trichlorofluoromethane	75-69-4	0.34	U	0.34	4.7	1.01
06192	1,2,3-Trichloropropane	96-18-4	0.39	U	0.39	4.7	1.01
06192	1,2,4-Trimethylbenzene	95-63-6	0.47	U	0.47	4.7	1.01
06192	1,3,5-Trimethylbenzene	108-67-8	0.12	U	0.12	4.7	1.01
06192	Vinyl Chloride	75-01-4	0.24	U	0.24	4.7	1.01
06192	m+p-Xylene	179601-23-1	0.20	U	0.20	4.7	1.01
06192	o-Xylene	95-47-6	0.20	U	0.20	4.7	1.01
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.8	U	5.8	18	25.2
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	580	1
04688	Benzidine	92-87-5	1,400	U	1,400	3,900	1
04688	Benzoic acid	65-85-0	190	U	190	580	1
04688	Benzyl alcohol	100-51-6	190	U	190	580	1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190	1
04688	Carbazole	86-74-8	19	U	19	190	1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	190	1
04688	4-Chloroaniline	106-47-8	77	U	77	190	1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190	1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190	1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190	1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190	1
04688	2-Chlorophenol	95-57-8	19	U	19	190	1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	190	1
04688	Dibenzofuran	132-64-9	19	U	19	190	1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190	1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190	1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190	1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390	1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190	1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	190	1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	190	1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580	1
04688	2,4-Dinitrophenol	51-28-5	770	U	770	1,200	1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	190	1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190	1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL122 SDG#: DE060-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	
04688	bis(2-Ethylhexyl)phthalate	117-81-7	30	J	19	390	1
04688	Hexachlorobenzene	118-74-1	19	U	19	190	1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190	1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580	1
04688	Hexachloroethane	67-72-1	19	U	19	190	1
04688	Isophorone	78-59-1	19	U	19	190	1
04688	2-Methylphenol	95-48-7	39	U	39	190	1
04688	4-Methylphenol	106-44-5	39	U	39	190	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	2-Nitroaniline	88-74-4	19	U	19	190	1
04688	3-Nitroaniline	99-09-2	39	U	39	190	1
04688	4-Nitroaniline	100-01-6	77	U	77	190	1
04688	Nitrobenzene	98-95-3	19	U	19	190	1
04688	2-Nitrophenol	88-75-5	19	U	19	190	1
04688	4-Nitrophenol	100-02-7	190	U	190	580	1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190	1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Pentachlorophenol	87-86-5	190	U	190	580	1
04688	Phenol	108-95-2	19	U	19	190	1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190	1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	190	1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	190	1
	Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration of 17 ug/kg. The blank value was not subtracted from the analytical result.						
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg		ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.77	U	0.77	1.9	1
10138	Acenaphthylene	208-96-8	0.39	U	0.39	1.9	1
10138	Anthracene	120-12-7	0.39	U	0.39	1.9	1
10138	Benzo(a)anthracene	56-55-3	0.77	U	0.77	1.9	1
10138	Benzo(a)pyrene	50-32-8	0.77	U	0.77	1.9	1
10138	Benzo(b)fluoranthene	205-99-2	0.77	U	0.77	1.9	1
10138	Benzo(g,h,i)perylene	191-24-2	0.77	U	0.77	1.9	1
10138	Benzo(k)fluoranthene	207-08-9	0.77	U	0.77	1.9	1
10138	Butylbenzylphthalate	85-68-7	7.0	U	7.0	21	1
10138	Di-n-butylphthalate	84-74-2	7.0	U	7.0	21	1
10138	Chrysene	218-01-9	0.39	U	0.39	1.9	1
10138	Dibenz(a,h)anthracene	53-70-3	0.77	U	0.77	1.9	1
10138	Diethylphthalate	84-66-2	7.0	U	7.0	21	1
10138	Dimethylphthalate	131-11-3	7.0	U	7.0	21	1
10138	Fluoranthene	206-44-0	0.77	U	0.77	1.9	1
10138	Fluorene	86-73-7	0.77	U	0.77	1.9	1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	U	0.77	1.9	1
10138	1-Methylnaphthalene	90-12-0	0.77	U	0.77	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL122 SDG#: DE060-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	
10138	2-Methylnaphthalene	91-57-6	0.77	U	0.77	1.9	1
10138	Naphthalene	91-20-3	0.77	U	0.77	1.9	1
10138	N-Nitrosodimethylamine	62-75-9	0.77	U	0.77	1.9	1
10138	Di-n-octylphthalate	117-84-0	7.0	U	7.0	21	1
10138	Phenanthrene	85-01-8	0.77	U	0.77	1.9	1
10138	Pyrene	129-00-0	0.77	U	0.77	1.9	1
	The GC/MS semivolatile internal standard peak areas were outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.						
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.4	U	2.4	5.8	1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8	1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8	1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.8	1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0	1
10225	PCB-1221	11104-28-2	0.58	U	0.58	2.0	1
10225	PCB-1232	11141-16-5	0.60	U	0.60	2.0	1
10225	PCB-1242	53469-21-9	0.58	U	0.58	2.0	1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0	1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0	1
10225	PCB-1260	11096-82-5	0.38	U	0.38	2.0	1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0	1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	33,200		5.66	22.5	1
07914	Boron	7440-42-8	5.01	U	5.01	28.1	5
	Reporting limits were raised due to interference from the sample matrix.						
01650	Calcium	7440-70-2	4,930		6.90	22.5	1
01654	Iron	7439-89-6	42,200		26.5	112	5
01656	Lithium	7439-93-2	47.2		0.25	2.2	1
01657	Magnesium	7439-95-4	10,300		2.86	11.2	1
06958	Manganese	7439-96-5	736		0.0877	0.562	1
10145	Phosphorus	7723-14-0	706		0.630	11.2	1
01662	Potassium	7440-09-7	3,800		20.2	56.2	1
01667	Sodium	7440-23-5	197		42.0	112	1
07968	Strontium	7440-24-6	32.9		0.0697	0.562	1
06969	Tin	7440-31-5	3.33	J	1.12	11.2	1
06970	Titanium	7440-32-6	1,570		0.427	1.12	1
10146	Zirconium	7440-67-7	2.49	J	0.945	5.62	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.185	J	0.0669	0.223	2

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL122 SDG#: DE060-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	10.7		0.0891	0.446	2
06126	Barium	7440-39-3	192		0.120	0.446	2
06127	Beryllium	7440-41-7	1.39		0.0178	0.111	2
06128	Cadmium	7440-43-9	0.106	J	0.0446	0.111	2
06131	Chromium	7440-47-3	44.3		0.134	0.446	2
06132	Cobalt	7440-48-4	14.0		0.0223	0.111	2
06133	Copper	7440-50-8	37.0		0.0735	0.446	2
06135	Lead	7439-92-1	17.0		0.0116	0.223	2
06138	Molybdenum	7439-98-7	0.896		0.0557	0.111	2
06139	Nickel	7440-02-0	27.3		0.111	0.446	2
06141	Selenium	7782-49-2	0.381	J	0.0446	0.446	2
06142	Silver	7440-22-4	0.0181	J	0.0134	0.111	2
06145	Thallium	7440-28-0	0.384		0.0334	0.111	2
06148	Vanadium	7440-62-2	67.6		0.0245	0.111	2
06149	Zinc	7440-66-6	97.0		0.624	3.34	2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0056	J	0.0032	0.112	1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	1.8		0.93	1.2	1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4	U	10.4	34.8	1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.42	J	0.23	1.2	1
	ASTM D1498		**mV**		**mV**	**mV**	
01821	32a OR Potential	n.a.	382		10.0	10.0	1
	The oxidation-reduction potential is reported in mV as referred to the standard hydrogen scale.						
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	
00394	22a pH by 9045C	n.a.	6.91		0.0100	0.0100	1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	
11624	28a Moisture Content by 160.3	n.a.	13.7		0.50	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL122 SDG#: DE060-12

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-122-SA5B-SB-2.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B110172AA	01/18/2011 00:43	Laura M Krieger	1.01
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110171AA	01/17/2011 18:19	Jason M Long	25.2
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:12	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201101423510	01/14/2011 15:15	Christopher D Meeks	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201101423510	01/14/2011 15:13	Christopher D Meeks	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11019SLA026	01/27/2011 10:05	Brian K Graham	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11020SLB026	01/25/2011 17:02	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11020SLB026	01/21/2011 03:00	Sherry L Morrow	1
00381	BNA Soil Sonication	SW-846 3550B	1	11019SLA026	01/19/2011 18:30	Sally L Appleyard	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	110200023A	01/21/2011 16:42	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	110170030A	01/27/2011 21:36	Lindsey K Lafferty	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	110170030A	01/18/2011 06:30	Joseph S Feister	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	2	110200023A	01/21/2011 09:30	Maria Davenport	1
01643	Aluminum	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
07914	Boron	SW-846 6010B	1	110195708001	01/21/2011 21:21	John P Hook	5
01650	Calcium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
01654	Iron	SW-846 6010B	1	110195708001	01/21/2011 21:21	John P Hook	5
01656	Lithium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
01657	Magnesium	SW-846 6010B	1	110195708001	01/21/2011 21:17	John P Hook	1
06958	Manganese	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
10145	Phosphorus	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
01662	Potassium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
01667	Sodium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
07968	Strontium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
06969	Tin	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
06970	Titanium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
10146	Zirconium	SW-846 6010B	2	110195708001	01/21/2011 21:17	John P Hook	1
06124	Antimony	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06125	Arsenic	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06126	Barium	SW-846 6020	1	110191026001D	01/21/2011 17:03	David K Beck	2

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183557
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL122 SDG#: DE060-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06127	Beryllium	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06128	Cadmium	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06131	Chromium	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06132	Cobalt	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06133	Copper	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06135	Lead	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06138	Molybdenum	SW-846 6020	1	110191026001C	01/21/2011 17:03	David K Beck	2
06139	Nickel	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06141	Selenium	SW-846 6020	1	110191026001B	01/21/2011 17:03	David K Beck	2
06142	Silver	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06145	Thallium	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06148	Vanadium	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
06149	Zinc	SW-846 6020	1	110191026001A	01/21/2011 17:03	David K Beck	2
00159	Mercury	SW-846 7471A	1	110215711003	01/24/2011 12:15	Damary Valentin	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	110195708001	01/19/2011 20:46	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	110191026001	01/19/2011 20:53	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	110195711001	01/19/2011 23:55	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	2	110215711003	01/24/2011 00:30	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11025025203B	01/27/2011 13:41	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11020621201B	01/25/2011 01:14	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11025243202A	01/29/2011 19:04	Ashley M Adams	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11025025203B	01/25/2011 23:40	Venia B McFadden	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11020621201B	01/20/2011 13:15	William L Hamaker Jr	1
01821	32a OR Potential	ASTM D1498	1	11018182102B	01/18/2011 12:45	Michelle L Lalli	1
00394	22a pH by 9045C	SW-846 9045C modified	1	11018039402B	01/18/2011 12:45	Michelle L Lalli	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	1	11025243202A	01/25/2011 22:00	Daniel S Smith	1
11624	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183558
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-20 SDG#: DE060-13EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/l		ug/l	ug/l	
04678	Aniline	62-53-3	1	U	1	5	1
04678	Benzidine	92-87-5	21	U	21	63	1
04678	Benzoic acid	65-85-0	6	U	6	16	1
04678	Benzyl alcohol	100-51-6	5	U	5	16	1
04678	4-Bromophenyl-phenylether	101-55-3	1	U	1	5	1
04678	Carbazole	86-74-8	1	U	1	5	1
04678	4-Chloro-3-methylphenol	59-50-7	1	U	1	5	1
04678	4-Chloroaniline	106-47-8	1	U	1	5	1
04678	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	5	1
04678	bis(2-Chloroethyl)ether	111-44-4	1	U	1	5	1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	5	1
04678	2-Chloronaphthalene	91-58-7	2	U	2	5	1
04678	2-Chlorophenol	95-57-8	1	U	1	5	1
04678	4-Chlorophenyl-phenylether	7005-72-3	2	U	2	5	1
04678	Dibenzofuran	132-64-9	1	U	1	5	1
04678	1,2-Dichlorobenzene	95-50-1	1	U	1	5	1
04678	1,3-Dichlorobenzene	541-73-1	1	U	1	5	1
04678	1,4-Dichlorobenzene	106-46-7	1	U	1	5	1
04678	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5	1
04678	2,4-Dichlorophenol	120-83-2	1	U	1	5	1
04678	2,4-Dimethylphenol	105-67-9	3	U	3	11	1
04678	3,5-Dimethylphenol	108-68-9	3	U	3	11	1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	16	1
04678	2,4-Dinitrophenol	51-28-5	11	U	11	32	1
04678	2,4-Dinitrotoluene	121-14-2	1	U	1	5	1
04678	2,6-Dinitrotoluene	606-20-2	1	U	1	5	1
04678	1,2-Diphenylhydrazine	122-66-7	1	U	1	5	1
04678	Hexachlorobenzene	118-74-1	1	U	1	5	1
04678	Hexachlorobutadiene	87-68-3	1	U	1	5	1
04678	Hexachlorocyclopentadiene	77-47-4	5	U	5	16	1
04678	Hexachloroethane	67-72-1	1	U	1	5	1
04678	Isophorone	78-59-1	1	U	1	5	1
04678	2-Methylphenol	95-48-7	1	U	1	5	1
04678	4-Methylphenol	106-44-5	2	U	2	5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04678	2-Nitroaniline	88-74-4	1	U	1	5	1
04678	3-Nitroaniline	99-09-2	1	U	1	5	1
04678	4-Nitroaniline	100-01-6	1	U	1	5	1
04678	Nitrobenzene	98-95-3	1	U	1	5	1
04678	2-Nitrophenol	88-75-5	1	U	1	5	1
04678	4-Nitrophenol	100-02-7	11	U	11	32	1
04678	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	5	1
04678	N-Nitrosodiphenylamine	86-30-6	2	U	2	5	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04678	Pentachlorophenol	87-86-5	3	U	3	16	1
04678	Phenol	108-95-2	1	U	1	5	1

*=This limit was used in the evaluation of the final result

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183558
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-20 SDG#: DE060-13EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l		ug/l	ug/l	
04678	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5	1
04678	2,4,5-Trichlorophenol	95-95-4	1	U	1	5	1
04678	2,4,6-Trichlorophenol	88-06-2	1	U	1	5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l		ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.012	U	0.012	0.058	1
10137	Acenaphthylene	208-96-8	0.012	U	0.012	0.058	1
10137	Anthracene	120-12-7	0.012	U	0.012	0.058	1
10137	Benzo(a)anthracene	56-55-3	0.012	U	0.012	0.058	1
10137	Benzo(a)pyrene	50-32-8	0.012	U	0.012	0.058	1
10137	Benzo(b)fluoranthene	205-99-2	0.012	U	0.012	0.058	1
10137	Benzo(g,h,i)perylene	191-24-2	0.012	U	0.012	0.058	1
10137	Benzo(k)fluoranthene	207-08-9	0.012	U	0.012	0.058	1
10137	Butylbenzylphthalate	85-68-7	0.058	U	0.058	1.2	1
10137	Di-n-butylphthalate	84-74-2	0.62	J	0.058	1.2	1
10137	Chrysene	218-01-9	0.012	U	0.012	0.058	1
10137	Dibenz(a,h)anthracene	53-70-3	0.012	U	0.012	0.058	1
10137	Diethylphthalate	84-66-2	0.15	J	0.058	1.2	1
10137	Dimethylphthalate	131-11-3	0.058	U	0.058	1.2	1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.27	J	0.058	1.2	1
10137	Fluoranthene	206-44-0	0.012	U	0.012	0.058	1
10137	Fluorene	86-73-7	0.012	U	0.012	0.058	1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.012	U	0.012	0.058	1
10137	1-Methylnaphthalene	90-12-0	0.012	U	0.012	0.058	1
10137	2-Methylnaphthalene	91-57-6	0.012	U	0.012	0.058	1
10137	Naphthalene	91-20-3	0.059		0.012	0.058	1
10137	N-Nitrosodimethylamine	62-75-9	0.012	U	0.012	0.058	1
10137	Di-n-octylphthalate	117-84-0	0.058	U	0.058	1.2	1
10137	Phenanthrene	85-01-8	0.012	U	0.012	0.058	1
10137	Pyrene	129-00-0	0.012	U	0.012	0.058	1

The QC limits for n-nitrosodimethylamine are advisory only until sufficient data points can be obtained to calculate statistical limits.

The following compounds were detected in the method blank at the respective concentrations of:
naphthalene .35 ug/l
di-n-butylphthalate .057 ug/l
bis(2-ethylhexyl)phthalate .094 ug/l
These blank values were not subtracted from the analytical results. Sufficient sample was unavailable to repeat the analysis.

Reporting limits were raised due to limited sample volume.

Pesticides/PCBs	**SW-846 8082**		ug/l		ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10	U	0.10	0.52	1
10227	Aroclor 5442	12642-23-8	0.10	U	0.10	0.52	1
10227	Aroclor 5460	11126-42-4	0.10	U	0.10	0.52	1
10227	PCB-1016	12674-11-2	0.10	U	0.10	0.52	1
10227	PCB-1221	11104-28-2	0.10	U	0.10	0.52	1

*=This limit was used in the evaluation of the final result

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183558
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-20 SDG#: DE060-13EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/l**		**ug/l**	**ug/l**	
10227	PCB-1232	11141-16-5	0.21	U	0.21	0.52	1
10227	PCB-1242	53469-21-9	0.10	U	0.10	0.52	1
10227	PCB-1248	12672-29-6	0.10	U	0.10	0.52	1
10227	PCB-1254	11097-69-1	0.10	U	0.10	0.52	1
10227	PCB-1260	11096-82-5	0.10	U	0.10	0.52	1
10227	PCB-1262	37324-23-5	0.21	U	0.21	0.52	1
10227	PCB-1268	11100-14-4	0.17	U	0.17	0.52	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.0834	U	0.0834	0.200	1
08014	Boron	7440-42-8	0.0138	U	0.0138	0.0500	1
01750	Calcium	7440-70-2	0.0702	U	0.0702	0.200	1
01754	Iron	7439-89-6	0.0522	U	0.0522	0.200	1
01756	Lithium	7439-93-2	0.0024	U	0.0024	0.0200	1
01757	Magnesium	7439-95-4	0.0172	U	0.0172	0.100	1
07058	Manganese	7439-96-5	0.00084	U	0.00084	0.0050	1
10143	Phosphorus	7723-14-0	0.0089	U	0.0089	0.100	1
01762	Potassium	7440-09-7	0.239	U	0.239	0.500	1
01767	Sodium	7440-23-5	0.433	U	0.433	1.00	1
08068	Strontium	7440-24-6	0.00089	U	0.00089	0.0050	1
07069	Tin	7440-31-5	0.0098	U	0.0098	0.0200	1
07070	Titanium	7440-32-6	0.0038	U	0.0038	0.0100	1
10144	Zirconium	7440-67-7	0.0206	U	0.0206	0.0500	1
	SW-846 6020		**mg/l**		**mg/l**	**mg/l**	
06024	Antimony	7440-36-0	0.00030	U	0.00030	0.0010	1
06025	Arsenic	7440-38-2	0.00095	U	0.00095	0.0020	1
06026	Barium	7440-39-3	0.00053	U	0.00053	0.0020	1
06027	Beryllium	7440-41-7	0.00013	U	0.00013	0.00050	1
06028	Cadmium	7440-43-9	0.00020	U	0.00020	0.00050	1
06031	Chromium	7440-47-3	0.00060	U	0.00060	0.0020	1
06032	Cobalt	7440-48-4	0.00010	U	0.00010	0.00050	1
06033	Copper	7440-50-8	0.00038	U	0.00038	0.0020	1
06035	Lead	7439-92-1	0.000052	U	0.000052	0.0010	1
06038	Molybdenum	7439-98-7	0.00025	U	0.00025	0.00050	1
06039	Nickel	7440-02-0	0.00050	U	0.00050	0.0020	1
06041	Selenium	7782-49-2	0.00025	U	0.00025	0.0020	1
06042	Silver	7440-22-4	0.000080	U	0.000080	0.00050	1
06045	Thallium	7440-28-0	0.00015	U	0.00015	0.00050	1
06048	Vanadium	7440-62-2	0.00016	U	0.00016	0.00050	1
06049	Zinc	7440-66-6	0.0040	U	0.0040	0.0150	1
	SW-846 7470A		**mg/l**		**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.000050	U	0.000050	0.00020	1
Wet Chemistry	**EPA 300.0**		**mg/l**		**mg/l**	**mg/l**	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080	U	0.080	0.10	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183558
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-20 SDG#: DE060-13EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 314.0**		**ug/l**		**ug/l**	**ug/l**	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70	U	0.70	2.0	1
	SW-846 7199		**ug/l**		**ug/l**	**ug/l**	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0	U	5.0	10.0	1
	The holding time was not met.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	11018WAA026	01/22/2011 15:18	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11017WAD026	01/20/2011 22:00	Gregory J Drahovsky	1
00813	BNA Water Extraction	SW-846 3510C	1	11018WAA026	01/18/2011 15:45	Timothy J Attenberger	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	11017WAD026	01/17/2011 22:15	Elaine F Stoltzfus	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	110180016A	01/27/2011 23:27	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	110180016A	01/19/2011 03:00	Sherry L Morrow	1
01743	Aluminum	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
08014	Boron	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
01750	Calcium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
01754	Iron	SW-846 6010B	2	110201848008	01/21/2011 13:38	Eric L Eby	1
01756	Lithium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
01757	Magnesium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
07058	Manganese	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
10143	Phosphorus	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
01762	Potassium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
01767	Sodium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
08068	Strontium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
07069	Tin	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
07070	Titanium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
10144	Zirconium	SW-846 6010B	1	110171848002	01/18/2011 20:25	John P Hook	1
06024	Antimony	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06025	Arsenic	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06026	Barium	SW-846 6020	1	110176050002D	01/21/2011 06:59	David K Beck	1
06027	Beryllium	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06028	Cadmium	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183558
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-20 SDG#: DE060-13EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06031	Chromium	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06032	Cobalt	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06033	Copper	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06035	Lead	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06038	Molybdenum	SW-846 6020	1	110176050002C	01/21/2011 06:59	David K Beck	1
06039	Nickel	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06041	Selenium	SW-846 6020	1	110176050002B	01/21/2011 06:59	David K Beck	1
06042	Silver	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06045	Thallium	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06048	Vanadium	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
06049	Zinc	SW-846 6020	1	110176050002A	01/21/2011 06:59	David K Beck	1
00259	Mercury	SW-846 7470A	1	110175713003	01/18/2011 08:48	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110171848002	01/18/2011 10:03	Denise K Conners	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	2	110201848008	01/20/2011 20:00	Mirit S Shenouda	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	110176050002	01/18/2011 10:00	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	110175713003	01/17/2011 14:30	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	11026196602A	01/27/2011 01:16	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	11019621701A	01/19/2011 15:15	William L Hamaker Jr	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	11019196401B	01/19/2011 11:16	Ashley M Adams	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB21-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183559
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-21 SDG#: DE060-14EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/l		ug/l	ug/l	
04678	Aniline	62-53-3	1	U	1	5	1
04678	Benzidine	92-87-5	22	U	22	65	1
04678	Benzoic acid	65-85-0	6	U	6	16	1
04678	Benzyl alcohol	100-51-6	5	U	5	16	1
04678	4-Bromophenyl-phenylether	101-55-3	1	U	1	5	1
04678	Carbazole	86-74-8	1	U	1	5	1
04678	4-Chloro-3-methylphenol	59-50-7	1	U	1	5	1
04678	4-Chloroaniline	106-47-8	1	U	1	5	1
04678	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	5	1
04678	bis(2-Chloroethyl)ether	111-44-4	1	U	1	5	1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	5	1
04678	2-Chloronaphthalene	91-58-7	2	U	2	5	1
04678	2-Chlorophenol	95-57-8	1	U	1	5	1
04678	4-Chlorophenyl-phenylether	7005-72-3	2	U	2	5	1
04678	Dibenzofuran	132-64-9	1	U	1	5	1
04678	1,2-Dichlorobenzene	95-50-1	1	U	1	5	1
04678	1,3-Dichlorobenzene	541-73-1	1	U	1	5	1
04678	1,4-Dichlorobenzene	106-46-7	1	U	1	5	1
04678	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5	1
04678	2,4-Dichlorophenol	120-83-2	1	U	1	5	1
04678	2,4-Dimethylphenol	105-67-9	3	U	3	11	1
04678	3,5-Dimethylphenol	108-68-9	3	U	3	11	1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	16	1
04678	2,4-Dinitrophenol	51-28-5	11	U	11	32	1
04678	2,4-Dinitrotoluene	121-14-2	1	U	1	5	1
04678	2,6-Dinitrotoluene	606-20-2	1	U	1	5	1
04678	1,2-Diphenylhydrazine	122-66-7	1	U	1	5	1
04678	Hexachlorobenzene	118-74-1	1	U	1	5	1
04678	Hexachlorobutadiene	87-68-3	1	U	1	5	1
04678	Hexachlorocyclopentadiene	77-47-4	5	U	5	16	1
04678	Hexachloroethane	67-72-1	1	U	1	5	1
04678	Isophorone	78-59-1	1	U	1	5	1
04678	2-Methylphenol	95-48-7	1	U	1	5	1
04678	4-Methylphenol	106-44-5	2	U	2	5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04678	2-Nitroaniline	88-74-4	1	U	1	5	1
04678	3-Nitroaniline	99-09-2	1	U	1	5	1
04678	4-Nitroaniline	100-01-6	1	U	1	5	1
04678	Nitrobenzene	98-95-3	1	U	1	5	1
04678	2-Nitrophenol	88-75-5	1	U	1	5	1
04678	4-Nitrophenol	100-02-7	11	U	11	32	1
04678	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	5	1
04678	N-Nitrosodiphenylamine	86-30-6	2	U	2	5	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04678	Pentachlorophenol	87-86-5	3	U	3	16	1
04678	Phenol	108-95-2	1	U	1	5	1

*=This limit was used in the evaluation of the final result

Sample Description: EB21-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183559
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-21 SDG#: DE060-14EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/l		ug/l	ug/l	
04678	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5	1
04678	2,4,5-Trichlorophenol	95-95-4	1	U	1	5	1
04678	2,4,6-Trichlorophenol	88-06-2	1	U	1	5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l		ug/l	ug/l	
10137	Acenaphthene	83-32-9	0.010	U	0.010	0.051	1
10137	Acenaphthylene	208-96-8	0.010	U	0.010	0.051	1
10137	Anthracene	120-12-7	0.010	U	0.010	0.051	1
10137	Benzo(a)anthracene	56-55-3	0.010	U	0.010	0.051	1
10137	Benzo(a)pyrene	50-32-8	0.010	U	0.010	0.051	1
10137	Benzo(b)fluoranthene	205-99-2	0.010	U	0.010	0.051	1
10137	Benzo(g,h,i)perylene	191-24-2	0.010	U	0.010	0.051	1
10137	Benzo(k)fluoranthene	207-08-9	0.010	U	0.010	0.051	1
10137	Butylbenzylphthalate	85-68-7	0.051	U	0.051	1.0	1
10137	Di-n-butylphthalate	84-74-2	0.57	J	0.051	1.0	1
10137	Chrysene	218-01-9	0.010	U	0.010	0.051	1
10137	Dibenz(a,h)anthracene	53-70-3	0.010	U	0.010	0.051	1
10137	Diethylphthalate	84-66-2	0.15	J	0.051	1.0	1
10137	Dimethylphthalate	131-11-3	0.051	U	0.051	1.0	1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.051	U	0.051	1.0	1
10137	Fluoranthene	206-44-0	0.010	U	0.010	0.051	1
10137	Fluorene	86-73-7	0.010	U	0.010	0.051	1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.010	U	0.010	0.051	1
10137	1-Methylnaphthalene	90-12-0	0.010	U	0.010	0.051	1
10137	2-Methylnaphthalene	91-57-6	0.010	U	0.010	0.051	1
10137	Naphthalene	91-20-3	0.029	J	0.010	0.051	1
10137	N-Nitrosodimethylamine	62-75-9	0.010	U	0.010	0.051	1
10137	Di-n-octylphthalate	117-84-0	0.051	U	0.051	1.0	1
10137	Phenanthrene	85-01-8	0.010	U	0.010	0.051	1
10137	Pyrene	129-00-0	0.010	U	0.010	0.051	1

The QC limits for n-nitrosodimethylamine are advisory only until sufficient data points can be obtained to calculate statistical limits.

The following compounds were detected in the method blank at the respective concentrations of:
naphthalene .35 ug/l
2-methylnaphthalene .054 ug/l
di-n-butylphthalate .057 ug/l
These blank values were not subtracted from the analytical results. Sufficient sample was unavailable to repeat the analysis.

The GC/MS semivolatile surrogate recoveries are outside of QC limits in this sample. Sufficient sample was unavailable to repeat the analysis.

Pesticides/PCBs	**SW-846 8082**		ug/l		ug/l	ug/l	
10227	Aroclor 5432	63496-31-1	0.10	U	0.10	0.52	1
10227	Aroclor 5442	12642-23-8	0.10	U	0.10	0.52	1
10227	Aroclor 5460	11126-42-4	0.10	U	0.10	0.52	1
10227	PCB-1016	12674-11-2	0.10	U	0.10	0.52	1

*=This limit was used in the evaluation of the final result

Sample Description: EB21-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183559
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-21 SDG#: DE060-14EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/l**		**ug/l**	**ug/l**	
10227	PCB-1221	11104-28-2	0.10	U	0.10	0.52	1
10227	PCB-1232	11141-16-5	0.21	U	0.21	0.52	1
10227	PCB-1242	53469-21-9	0.10	U	0.10	0.52	1
10227	PCB-1248	12672-29-6	0.10	U	0.10	0.52	1
10227	PCB-1254	11097-69-1	0.10	U	0.10	0.52	1
10227	PCB-1260	11096-82-5	0.10	U	0.10	0.52	1
10227	PCB-1262	37324-23-5	0.21	U	0.21	0.52	1
10227	PCB-1268	11100-14-4	0.17	U	0.17	0.52	1
	The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.						
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.0834	U	0.0834	0.200	1
08014	Boron	7440-42-8	0.0138	U	0.0138	0.0500	1
01750	Calcium	7440-70-2	0.0702	U	0.0702	0.200	1
01754	Iron	7439-89-6	0.0522	U	0.0522	0.200	1
01756	Lithium	7439-93-2	0.0024	U	0.0024	0.0200	1
01757	Magnesium	7439-95-4	0.0172	U	0.0172	0.100	1
07058	Manganese	7439-96-5	0.00084	U	0.00084	0.0050	1
10143	Phosphorus	7723-14-0	0.0089	U	0.0089	0.100	1
01762	Potassium	7440-09-7	0.239	U	0.239	0.500	1
01767	Sodium	7440-23-5	0.433	U	0.433	1.00	1
08068	Strontium	7440-24-6	0.00089	U	0.00089	0.0050	1
07069	Tin	7440-31-5	0.0098	U	0.0098	0.0200	1
07070	Titanium	7440-32-6	0.0038	U	0.0038	0.0100	1
10144	Zirconium	7440-67-7	0.0206	U	0.0206	0.0500	1
	SW-846 6020		**mg/l**		**mg/l**	**mg/l**	
06024	Antimony	7440-36-0	0.00030	U	0.00030	0.0010	1
06025	Arsenic	7440-38-2	0.00095	U	0.00095	0.0020	1
06026	Barium	7440-39-3	0.00053	U	0.00053	0.0020	1
06027	Beryllium	7440-41-7	0.00013	U	0.00013	0.00050	1
06028	Cadmium	7440-43-9	0.00020	U	0.00020	0.00050	1
06031	Chromium	7440-47-3	0.00060	U	0.00060	0.0020	1
06032	Cobalt	7440-48-4	0.00010	U	0.00010	0.00050	1
06033	Copper	7440-50-8	0.00038	U	0.00038	0.0020	1
06035	Lead	7439-92-1	0.000052	U	0.000052	0.0010	1
06038	Molybdenum	7439-98-7	0.00025	U	0.00025	0.00050	1
06039	Nickel	7440-02-0	0.00050	U	0.00050	0.0020	1
06041	Selenium	7782-49-2	0.00025	U	0.00025	0.0020	1
06042	Silver	7440-22-4	0.000080	U	0.000080	0.00050	1
06045	Thallium	7440-28-0	0.00015	U	0.00015	0.00050	1
06048	Vanadium	7440-62-2	0.00016	U	0.00016	0.00050	1
06049	Zinc	7440-66-6	0.0040	U	0.0040	0.0150	1
	SW-846 7470A		**mg/l**		**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.000050	U	0.000050	0.00020	1
Wet Chemistry	**EPA 300.0**		**mg/l**		**mg/l**	**mg/l**	

*=This limit was used in the evaluation of the final result

Sample Description: EB21-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183559
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-21 SDG#: DE060-14EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/l**		**mg/l**	**mg/l**	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080	U	0.080	0.10	1
	EPA 314.0		**ug/l**		**ug/l**	**ug/l**	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70	U	0.70	2.0	1
	SW-846 7199		**ug/l**		**ug/l**	**ug/l**	
06467	3b Cr VI by EPA 7199 The holding time was not met.	18540-29-9	5.0	U	5.0	10.0	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	11018WAA026	01/22/2011 15:44	Brian K Graham	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11017WAD026	01/20/2011 22:33	Gregory J Drahovsky	1
00813	BNA Water Extraction	SW-846 3510C	1	11018WAA026	01/18/2011 15:45	Timothy J Attenberger	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	11017WAD026	01/17/2011 22:15	Elaine F Stoltzfus	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	110180016A	01/27/2011 23:45	Lindsey K Lafferty	1
11117	PCB Waters Extraction	SW-846 3510C	1	110180016A	01/19/2011 03:00	Sherry L Morrow	1
01743	Aluminum	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
08014	Boron	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
01750	Calcium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
01754	Iron	SW-846 6010B	1	110201848008	01/21/2011 13:41	Eric L Eby	1
01756	Lithium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
01757	Magnesium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
07058	Manganese	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
10143	Phosphorus	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
01762	Potassium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
01767	Sodium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
08068	Strontium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
07069	Tin	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
07070	Titanium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
10144	Zirconium	SW-846 6010B	1	110171848002	01/18/2011 20:29	John P Hook	1
06024	Antimony	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06025	Arsenic	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB21-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183559
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-21 SDG#: DE060-14EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06026	Barium	SW-846 6020	1	110176050002D	01/21/2011 07:02	David K Beck	1
06027	Beryllium	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06028	Cadmium	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06031	Chromium	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06032	Cobalt	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06033	Copper	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06035	Lead	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06038	Molybdenum	SW-846 6020	1	110176050002C	01/21/2011 07:02	David K Beck	1
06039	Nickel	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06041	Selenium	SW-846 6020	1	110176050002B	01/21/2011 07:02	David K Beck	1
06042	Silver	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06045	Thallium	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06048	Vanadium	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
06049	Zinc	SW-846 6020	1	110176050002A	01/21/2011 07:02	David K Beck	1
00259	Mercury	SW-846 7470A	1	110175713003	01/18/2011 08:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	110171848002	01/18/2011 10:03	Denise K Conners	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	2	110201848008	01/20/2011 20:00	Mirit S Shenouda	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	110176050002	01/18/2011 10:00	Denise K Conners	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	110175713003	01/17/2011 14:30	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	11026196602A	01/27/2011 01:32	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	11019621701A	01/19/2011 15:38	William L Hamaker Jr	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	11019196401B	01/19/2011 13:08	Ashley M Adams	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: TB-011311 Water
SSFL Area IV Collocated Soil Sampling
TB-011311

LLI Sample # WW 6183560
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:00

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

TB113 SDG#: DE060-15TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	
10904	Acetone	67-64-1	6	U	6	20	1
10904	Benzene	71-43-2	0.5	U	0.5	5	1
10904	Bromobenzene	108-86-1	1	U	1	5	1
10904	Bromochloromethane	74-97-5	1	U	1	5	1
10904	Bromodichloromethane	75-27-4	1	U	1	5	1
10904	Bromoform	75-25-2	1	U	1	5	1
10904	Bromomethane	74-83-9	1	U	1	5	1
10904	2-Butanone	78-93-3	3	U	3	10	1
10904	n-Butylbenzene	104-51-8	1	U	1	5	1
10904	sec-Butylbenzene	135-98-8	1	U	1	5	1
10904	tert-Butylbenzene	98-06-6	1	U	1	5	1
10904	Carbon Tetrachloride	56-23-5	1	U	1	5	1
10904	Chlorobenzene	108-90-7	0.8	U	0.8	5	1
10904	Chloroethane	75-00-3	1	U	1	5	1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2	U	2	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.						
10904	Chloroform	67-66-3	0.8	U	0.8	5	1
10904	Chloromethane	74-87-3	1	U	1	5	1
10904	2-Chlorotoluene	95-49-8	1	U	1	5	1
10904	4-Chlorotoluene	106-43-4	1	U	1	5	1
10904	Chlorotrifluoroethene	79-38-9	2	U	2	5	1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2	U	2	5	1
10904	Dibromochloromethane	124-48-1	1	U	1	5	1
10904	1,2-Dibromoethane	106-93-4	1	U	1	5	1
10904	Dibromomethane	74-95-3	1	U	1	5	1
10904	1,2-Dichlorobenzene	95-50-1	1	U	1	5	1
10904	1,3-Dichlorobenzene	541-73-1	1	U	1	5	1
10904	1,4-Dichlorobenzene	106-46-7	1	U	1	5	1
10904	Dichlorodifluoromethane	75-71-8	2	U	2	5	1
10904	1,1-Dichloroethane	75-34-3	1	U	1	5	1
10904	1,2-Dichloroethane	107-06-2	1	U	1	5	1
10904	1,1-Dichloroethene	75-35-4	0.8	U	0.8	5	1
10904	cis-1,2-Dichloroethene	156-59-2	0.8	U	0.8	5	1
10904	trans-1,2-Dichloroethene	156-60-5	0.8	U	0.8	5	1
10904	1,2-Dichloropropane	78-87-5	1	U	1	5	1
10904	1,3-Dichloropropane	142-28-9	1	U	1	5	1
10904	2,2-Dichloropropane	594-20-7	1	U	1	5	1
10904	1,1-Dichloropropene	563-58-6	1	U	1	5	1
10904	cis-1,3-Dichloropropene	10061-01-5	1	U	1	5	1
10904	trans-1,3-Dichloropropene	10061-02-6	1	U	1	5	1
10904	Ethylbenzene	100-41-4	0.8	U	0.8	5	1
10904	Freon 113	76-13-1	2	U	2	10	1
10904	Freon 133a	75-88-7	2	U	2	5	1
10904	Hexachlorobutadiene	87-68-3	2	U	2	5	1
10904	2-Hexanone	591-78-6	3	U	3	10	1
10904	Isopropylbenzene	98-82-8	1	U	1	5	1
10904	p-Isopropyltoluene	99-87-6	1	U	1	5	1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5	U	0.5	5	1
10904	4-Methyl-2-pentanone	108-10-1	3	U	3	10	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: TB-011311 Water
SSFL Area IV Collocated Soil Sampling
TB-011311

LLI Sample # WW 6183560
LLI Group # 1229054
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:00

Submitted: 01/14/2011 08:45
Reported: 02/08/2011 13:21

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

TB113 SDG#: DE060-15TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10904	Methylene Chloride	75-09-2	2	U	2	5	1
10904	n-Propylbenzene	103-65-1	1	U	1	5	1
10904	Styrene	100-42-5	1	U	1	5	1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	5	1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	5	1
10904	Tetrachloroethene	127-18-4	0.8	U	0.8	5	1
10904	Toluene	108-88-3	0.7	U	0.7	5	1
10904	1,2,3-Trichlorobenzene	87-61-6	1	U	1	5	1
10904	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5	1
10904	1,1,1-Trichloroethane	71-55-6	0.8	U	0.8	5	1
10904	1,1,2-Trichloroethane	79-00-5	0.8	U	0.8	5	1
10904	Trichloroethene	79-01-6	1	U	1	5	1
10904	Trichlorofluoromethane	75-69-4	2	U	2	5	1
10904	1,2,3-Trichloropropane	96-18-4	1	U	1	5	1
10904	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5	1
10904	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5	1
10904	Vinyl Chloride	75-01-4	1	U	1	5	1
10904	m+p-Xylene	179601-23-1	0.8	U	0.8	5	1
10904	o-Xylene	95-47-6	0.8	U	0.8	5	1
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/l**		**ug/l**	**ug/l**	
00527	1,4-Dioxane	123-91-1	0.5	U	0.5	2.0	1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	Y110141AA	01/14/2011 16:58	Frank A Valla, Jr	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E110191AA	01/19/2011 10:48	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y110141AA	01/14/2011 16:58	Frank A Valla, Jr	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	E110191AA	01/19/2011 10:48	Jason M Long	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B110172AA	Sample number(s): 6183546-6183547,6183549,6183551,6183553-6183554,6183557									
Acetone	6.7	U	6.7	8.0	ug/kg	119	114	32-209	4	30
Benzene	0.10	U	0.10	4.0	ug/kg	101	101	80-120	0	30
Bromobenzene	0.13	U	0.13	4.0	ug/kg	94	96	79-120	2	30
Bromochloromethane	0.33	U	0.33	4.0	ug/kg	107	105	79-124	2	30
Bromodichloromethane	0.08	U	0.08	4.0	ug/kg	96	95	78-120	2	30
Bromoform	0.40	U	0.40	4.0	ug/kg	106	102	70-120	4	30
Bromomethane	0.25	U	0.25	4.0	ug/kg	70	71	32-162	3	30
2-Butanone	1.2	U	1.2	8.0	ug/kg	97	96	46-153	1	30
n-Butylbenzene	0.12	U	0.12	4.0	ug/kg	93	94	72-120	1	30
sec-Butylbenzene	0.06	U	0.06	4.0	ug/kg	92	93	75-120	2	30
tert-Butylbenzene	0.16	U	0.16	4.0	ug/kg	89	91	75-120	2	30
Carbon Tetrachloride	0.14	U	0.14	4.0	ug/kg	103	104	69-122	0	30
Chlorobenzene	0.11	U	0.11	4.0	ug/kg	101	101	80-120	0	30
Chloroethane	0.13	U	0.13	4.0	ug/kg	71	72	37-154	1	30
2-Chloroethyl Vinyl Ether	0.30	U	0.30	4.0	ug/kg	87	89	43-146	3	30
Chloroform	0.12	U	0.12	4.0	ug/kg	101	101	80-120	0	30
Chloromethane	0.33	U	0.33	4.0	ug/kg	73	82	54-132	12	30
2-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	95	97	78-120	2	30
4-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	95	96	79-120	1	30
Chlorotrifluoroethene	0.50	U	0.50	5.0	ug/kg	110	114	22-131	4	30
1,2-Dibromo-3-chloropropane	0.70	U	0.70	4.0	ug/kg	85	87	58-120	1	30
Dibromochloromethane	0.20	U	0.20	4.0	ug/kg	101	100	77-120	2	30
1,2-Dibromoethane	0.17	U	0.17	4.0	ug/kg	100	100	80-120	1	30
Dibromomethane	0.24	U	0.24	4.0	ug/kg	103	101	80-120	2	30
1,2-Dichlorobenzene	0.09	U	0.09	4.0	ug/kg	99	99	79-120	0	30
1,3-Dichlorobenzene	0.12	U	0.12	4.0	ug/kg	95	97	78-120	1	30
1,4-Dichlorobenzene	0.16	U	0.16	4.0	ug/kg	98	97	79-120	1	30
Dichlorodifluoromethane	0.12	U	0.12	4.0	ug/kg	67	67	20-120	1	30
1,1-Dichloroethane	0.10	U	0.10	4.0	ug/kg	98	100	80-120	2	30
1,2-Dichloroethane	0.15	U	0.15	4.0	ug/kg	98	98	71-129	0	30
1,1-Dichloroethene	0.39	U	0.39	4.0	ug/kg	100	100	73-123	0	30
cis-1,2-Dichloroethene	0.19	U	0.19	4.0	ug/kg	103	104	80-120	1	30
trans-1,2-Dichloroethene	0.12	U	0.12	4.0	ug/kg	104	104	79-120	0	30
1,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	95	96	80-120	1	30
1,3-Dichloropropane	0.08	U	0.08	4.0	ug/kg	94	95	80-120	1	30
2,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	103	102	72-123	1	30
1,1-Dichloropropene	0.13	U	0.13	4.0	ug/kg	96	97	77-120	1	30
cis-1,3-Dichloropropene	0.16	U	0.16	4.0	ug/kg	87	88	80-120	0	30
trans-1,3-Dichloropropene	0.17	U	0.17	4.0	ug/kg	87	88	77-120	0	30
Ethylbenzene	0.06	U	0.06	4.0	ug/kg	96	96	80-120	0	30
Freon 113	0.11	U	0.11	4.0	ug/kg	99	99	61-126	0	30
Freon 133a	0.50	U	0.50	5.0	ug/kg	87	90	78-120	3	30
Hexachlorobutadiene	0.14	U	0.14	4.0	ug/kg	94	95	57-120	1	30
2-Hexanone	1.6	U	1.6	8.0	ug/kg	69	69	45-155	0	30
Isopropylbenzene	0.06	U	0.06	4.0	ug/kg	96	96	76-120	0	30
p-Isopropyltoluene	0.11	U	0.11	4.0	ug/kg	94	95	75-120	2	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21	U	0.21	4.0	ug/kg	94	98	74-121	4	30
4-Methyl-2-pentanone	0.39	U	0.39	8.0	ug/kg	68	68	61-134	0	30
Methylene Chloride	0.76	J	0.24	4.0	ug/kg	98	99	76-124	1	30
n-Propylbenzene	0.07	U	0.07	4.0	ug/kg	95	96	77-120	1	30
Styrene	0.10	U	0.10	4.0	ug/kg	99	99	76-120	0	30
1,1,1,2-Tetrachloroethane	0.11	U	0.11	4.0	ug/kg	105	105	80-120	0	30
1,1,2,2-Tetrachloroethane	0.23	U	0.23	4.0	ug/kg	91	92	71-123	1	30
Tetrachloroethene	0.20	U	0.20	4.0	ug/kg	113	108	77-120	4	30
Toluene	0.32	J	0.08	4.0	ug/kg	102	101	80-120	0	30
1,2,3-Trichlorobenzene	0.14	U	0.14	4.0	ug/kg	92	93	64-120	1	30
1,2,4-Trichlorobenzene	0.18	U	0.18	4.0	ug/kg	87	89	68-120	3	30
1,1,1-Trichloroethane	0.20	U	0.20	4.0	ug/kg	102	102	71-125	0	30
1,1,2-Trichloroethane	0.27	U	0.27	4.0	ug/kg	102	101	80-120	1	30
Trichloroethene	0.15	U	0.15	4.0	ug/kg	99	99	80-120	0	30
Trichlorofluoromethane	0.29	U	0.29	4.0	ug/kg	85	84	58-133	1	30
1,2,3-Trichloropropane	0.33	U	0.33	4.0	ug/kg	95	96	71-123	2	30
1,2,4-Trimethylbenzene	0.40	U	0.40	4.0	ug/kg	95	96	79-120	1	30
1,3,5-Trimethylbenzene	0.10	U	0.10	4.0	ug/kg	93	94	78-120	1	30
Vinyl Chloride	0.20	U	0.20	4.0	ug/kg	75	78	53-120	3	30
m+p-Xylene	0.17	U	0.17	4.0	ug/kg	102	101	80-120	0	30
o-Xylene	0.17	U	0.17	4.0	ug/kg	92	94	80-120	2	30
Batch number: E110171AA	Sample number(s): 6183546-6183547,6183549,6183551,6183553-6183554,6183557									
1,4-Dioxane	5.0	U	5.0	15	ug/kg	105	98	70-130	7	30
Batch number: E110191AA	Sample number(s): 6183560									
1,4-Dioxane	0.5	U	0.5	2.0	ug/l	105	108	60-132	3	30
Batch number: Y110141AA	Sample number(s): 6183560									
Acetone	6	U	6.	20	ug/l	157	140	49-234	12	30
Benzene	0.5	U	0.5	5	ug/l	97	99	79-120	2	30
Bromobenzene	1	U	1.	5	ug/l	100	101	80-120	1	30
Bromochloromethane	1	U	1.	5	ug/l	105	101	80-120	4	30
Bromodichloromethane	1	U	1.	5	ug/l	104	103	80-120	1	30
Bromoform	1	U	1.	5	ug/l	98	96	61-120	3	30
Bromomethane	1	U	1.	5	ug/l	103	102	44-120	1	30
2-Butanone	3	U	3.	10	ug/l	124	115	66-151	7	30
n-Butylbenzene	1	U	1.	5	ug/l	96	95	74-120	1	30
sec-Butylbenzene	1	U	1.	5	ug/l	100	99	78-120	1	30
tert-Butylbenzene	1	U	1.	5	ug/l	97	97	80-120	0	30
Carbon Tetrachloride	1	U	1.	5	ug/l	109	106	75-123	3	30
Chlorobenzene	0.8	U	0.8	5	ug/l	97	97	80-120	0	30
Chloroethane	1	U	1.	5	ug/l	104	103	49-129	1	30
2-Chloroethyl Vinyl Ether	2	U	2.	10	ug/l	109	108	56-129	1	30
Chloroform	0.8	U	0.8	5	ug/l	108	108	77-122	0	30
Chloromethane	1	U	1.	5	ug/l	110	110	60-129	0	30
2-Chlorotoluene	1	U	1.	5	ug/l	99	99	80-120	0	30
4-Chlorotoluene	1	U	1.	5	ug/l	97	97	80-120	0	30
Chlorotrifluoroethene	2	U	2.	5	ug/l	78	76	38-136	2	30
1,2-Dibromo-3-chloropropane	2	U	2.	5	ug/l	102	96	66-120	6	30
Dibromochloromethane	1	U	1.	5	ug/l	99	99	80-120	0	30
1,2-Dibromoethane	1	U	1.	5	ug/l	99	101	80-120	1	30
Dibromomethane	1	U	1.	5	ug/l	104	102	80-120	2	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	94	94	80-120	0	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	97	97	80-120	0	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	98	96	80-120	2	30
Dichlorodifluoromethane	2	U	2.	5	ug/l	110	109	47-120	0	30
1,1-Dichloroethane	1	U	1.	5	ug/l	100	103	79-120	3	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloroethane	1	U	1.	5	ug/l	116	113	70-130	3	30
1,1-Dichloroethene	0.8	U	0.8	5	ug/l	103	100	74-123	3	30
cis-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	99	102	80-120	3	30
trans-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	99	100	80-120	1	30
1,2-Dichloropropane	1	U	1.	5	ug/l	96	95	78-120	2	30
1,3-Dichloropropane	1	U	1.	5	ug/l	100	103	80-120	3	30
2,2-Dichloropropane	1	U	1.	5	ug/l	108	108	77-124	1	30
1,1-Dichloropropene	1	U	1.	5	ug/l	102	102	80-120	0	30
cis-1,3-Dichloropropene	1	U	1.	5	ug/l	98	96	80-120	1	30
trans-1,3-Dichloropropene	1	U	1.	5	ug/l	99	101	79-120	2	30
Ethylbenzene	0.8	U	0.8	5	ug/l	97	98	79-120	1	30
Freon 113	2	U	2.	10	ug/l	106	106	69-128	1	30
Freon 133a	2	U	2.	5	ug/l	93	94	77-120	1	30
Hexachlorobutadiene	2	U	2.	5	ug/l	95	97	58-120	3	30
2-Hexanone	3	U	3.	10	ug/l	113	109	65-136	4	30
Isopropylbenzene	1	U	1.	5	ug/l	97	96	77-120	1	30
p-Isopropyltoluene	1	U	1.	5	ug/l	101	100	80-120	1	30
Methyl Tertiary Butyl Ether	0.5	U	0.5	5	ug/l	106	106	76-120	0	30
4-Methyl-2-pentanone	3	U	3.	10	ug/l	100	97	70-121	3	30
Methylene Chloride	2	U	2.	5	ug/l	101	97	80-120	3	30
n-Propylbenzene	1	U	1.	5	ug/l	100	99	80-120	0	30
Styrene	1	U	1.	5	ug/l	96	96	80-120	0	30
1,1,1,2-Tetrachloroethane	1	U	1.	5	ug/l	99	100	80-120	1	30
1,1,2,2-Tetrachloroethane	1	U	1.	5	ug/l	93	95	71-120	2	30
Tetrachloroethene	0.8	U	0.8	5	ug/l	99	100	80-121	1	30
Toluene	0.7	U	0.7	5	ug/l	95	96	79-120	1	30
1,2,3-Trichlorobenzene	1	U	1.	5	ug/l	102	102	65-120	1	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	101	99	67-120	2	30
1,1,1-Trichloroethane	0.8	U	0.8	5	ug/l	96	97	75-127	1	30
1,1,2-Trichloroethane	0.8	U	0.8	5	ug/l	97	100	80-120	3	30
Trichloroethene	1	U	1.	5	ug/l	101	101	80-120	0	30
Trichlorofluoromethane	2	U	2.	5	ug/l	111	109	64-129	2	30
1,2,3-Trichloropropane	1	U	1.	5	ug/l	103	102	80-120	1	30
1,2,4-Trimethylbenzene	1	U	1.	5	ug/l	99	99	74-120	0	30
1,3,5-Trimethylbenzene	1	U	1.	5	ug/l	98	98	75-120	0	30
Vinyl Chloride	1	U	1.	5	ug/l	95	94	65-125	1	30
m+p-Xylene	0.8	U	0.8	5	ug/l	95	95	80-120	0	30
o-Xylene	0.8	U	0.8	5	ug/l	95	96	80-120	2	30
Batch number: 11017WAD026	Sample number(s): 6183558-6183559									
Acenaphthene	0.035	J	0.010	0.050	ug/l	96	95	74-109	1	30
Acenaphthylene	0.010	U	0.010	0.050	ug/l	100	101	70-110	1	30
Anthracene	0.014	J	0.010	0.050	ug/l	100	97	66-111	3	30
Benzo(a)anthracene	0.017	J	0.010	0.050	ug/l	99	98	72-114	1	30
Benzo(a)pyrene	0.014	J	0.010	0.050	ug/l	117*	117*	64-115	0	30
Benzo(b)fluoranthene	0.017	J	0.010	0.050	ug/l	123	123	69-123	0	30
Benzo(g,h,i)perylene	0.016	J	0.010	0.050	ug/l	113	124	68-125	10	30
Benzo(k)fluoranthene	0.020	J	0.010	0.050	ug/l	126*	124*	72-122	2	30
Butylbenzylphthalate	0.050	U	0.050	1.0	ug/l	99	95	70-130	3	30
Di-n-butylphthalate	0.057	J	0.050	1.0	ug/l	109	104	70-130	5	30
Chrysene	0.020	J	0.010	0.050	ug/l	98	98	76-116	1	30
Dibenz(a,h)anthracene	0.015	J	0.010	0.050	ug/l	114	125	71-125	9	30
Diethylphthalate	0.050	U	0.050	1.0	ug/l	100	98	70-130	2	30
Dimethylphthalate	0.050	U	0.050	1.0	ug/l	86	83	70-130	4	30
Bis(2-Ethylhexyl)phthalate	0.094	J	0.050	1.0	ug/l	107	108	70-130	1	30
Fluoranthene	0.022	J	0.010	0.050	ug/l	101	98	75-116	3	30
Fluorene	0.038	J	0.010	0.050	ug/l	102	100	75-114	2	30
Indeno(1,2,3-cd)pyrene	0.016	J	0.010	0.050	ug/l	114	126*	69-124	10	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1-Methylnaphthalene	0.032	J	0.010	0.050	ug/l	98	98	71-117	0	30
2-Methylnaphthalene	0.054		0.010	0.050	ug/l	94	93	75-115	1	30
Naphthalene	0.35		0.010	0.050	ug/l	95	92	72-109	3	30
N-Nitrosodimethylamine	0.010	U	0.010	0.050	ug/l	63*	63*	70-130	1	30
Di-n-octylphthalate	0.050	U	0.050	1.0	ug/l	118	116	70-130	1	30
Phenanthrene	0.046	J	0.010	0.050	ug/l	98	95	76-111	4	30
Pyrene	0.017	J	0.010	0.050	ug/l	96	95	69-118	1	30
Batch number: 11018WAA026	Sample number(s): 6183558-6183559									
Aniline	1	U	1.	5	ug/l	70	78	49-101	11	30
Benzidine	20	U	20.	60	ug/l	72	74	20-109	2	30
Benzoic acid	6	U	6.	15	ug/l	26	43	10-69	52*	30
Benzyl alcohol	5	U	5.	15	ug/l	72	81	66-97	12	30
4-Bromophenyl-phenylether	1	U	1.	5	ug/l	94	96	82-117	2	30
Carbazole	1	U	1.	5	ug/l	95	98	81-114	3	30
4-Chloro-3-methylphenol	1	U	1.	5	ug/l	90	93	70-123	4	30
4-Chloroaniline	1	U	1.	5	ug/l	55	55	42-124	0	30
bis(2-Chloroethoxy)methane	1	U	1.	5	ug/l	93	93	74-124	0	30
bis(2-Chloroethyl)ether	1	U	1.	5	ug/l	91	96	77-108	5	30
bis(2-Chloroisopropyl)ether	1	U	1.	5	ug/l	92	95	62-127	3	30
2-Chloronaphthalene	2	U	2.	5	ug/l	78	76	54-132	3	30
2-Chlorophenol	1	U	1.	5	ug/l	88	93	77-108	6	30
4-Chlorophenyl-phenylether	2	U	2.	5	ug/l	95	95	82-111	0	30
Dibenzofuran	1	U	1.	5	ug/l	96	96	83-108	0	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	87	88	67-108	1	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	85	86	63-110	1	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	85	86	65-113	1	30
3,3'-Dichlorobenzidine	2	U	2.	5	ug/l	59	62	49-111	6	30
2,4-Dichlorophenol	1	U	1.	5	ug/l	92	96	80-109	4	30
2,4-Dimethylphenol	3	U	3.	10	ug/l	92	93	72-110	1	30
3,5-Dimethylphenol	3	U	3.	10	ug/l	100	104	70-130	4	30
4,6-Dinitro-2-methylphenol	5	U	5.	15	ug/l	89	95	78-119	6	30
2,4-Dinitrophenol	10	U	10.	30	ug/l	87	97	64-120	11	30
2,4-Dinitrotoluene	1	U	1.	5	ug/l	95	97	81-115	3	30
2,6-Dinitrotoluene	1	U	1.	5	ug/l	96	97	85-115	1	30
1,2-Diphenylhydrazine	1	U	1.	5	ug/l	99	102	78-116	3	30
Hexachlorobenzene	1	U	1.	5	ug/l	95	98	81-118	3	30
Hexachlorobutadiene	1	U	1.	5	ug/l	86	86	57-124	0	30
Hexachlorocyclopentadiene	5	U	5.	15	ug/l	74	75	10-118	2	30
Hexachloroethane	1	U	1.	5	ug/l	82	83	52-113	2	30
Isophorone	1	U	1.	5	ug/l	94	96	74-117	2	30
2-Methylphenol	1	U	1.	5	ug/l	80	87	64-101	8	30
4-Methylphenol	2	U	2.	5	ug/l	69	77	61-103	11	30
2-Nitroaniline	1	U	1.	5	ug/l	95	96	83-116	1	30
3-Nitroaniline	1	U	1.	5	ug/l	92	95	74-113	3	30
4-Nitroaniline	1	U	1.	5	ug/l	77	77	59-100	0	30
Nitrobenzene	1	U	1.	5	ug/l	92	93	75-109	2	30
2-Nitrophenol	1	U	1.	5	ug/l	91	95	86-120	5	30
4-Nitrophenol	10	U	10.	30	ug/l	33	39	16-78	17	30
N-Nitroso-di-n-propylamine	1	U	1.	5	ug/l	93	97	69-110	5	30
N-Nitrosodiphenylamine	2	U	2.	5	ug/l	95	98	67-136	3	30
Pentachlorophenol	3	U	3.	15	ug/l	97	99	53-110	3	30
Phenol	1	U	1.	5	ug/l	34	42	29-67	20	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	88	89	71-112	1	30
2,4,5-Trichlorophenol	1	U	1.	5	ug/l	91	96	79-107	5	30
2,4,6-Trichlorophenol	1	U	1.	5	ug/l	93	97	81-113	4	30
Batch number: 11019SLA026	Sample number(s): 6183546-6183557									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Aniline	170 U		170.	500	ug/kg	64		10-107		
Benzidine	1,200 U		1,200.	3,300	ug/kg	45		15-121		
Benzoic acid	170 U		170.	500	ug/kg	105		10-154		
Benzyl alcohol	170 U		170.	500	ug/kg	98		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	94		79-117		
Carbazole	17	U	17.	170	ug/kg	97		77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	96		74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	36		10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	93		70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	95		70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	91		68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	78		67-127		
2-Chlorophenol	17	U	17.	170	ug/kg	95		72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	95		79-110		
Dibenzofuran	17	U	17.	170	ug/kg	95		79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	89		79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	89		70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	88		74-106		
3,3'-Dichlorobenzidine	100 U		100.	330	ug/kg	65		38-105		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	97		75-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	98		72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	106		70-130		
4,6-Dinitro-2-methylphenol	170 U		170.	500	ug/kg	80		53-110		
2,4-Dinitrophenol	670 U		670.	2,000	ug/kg	77		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	96		73-115		
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	98		79-115		
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	99		77-111		
bis(2-Ethylhexyl)phthalate	17	J	17.	330	ug/kg	97		75-117		
Hexachlorobenzene	17	U	17.	170	ug/kg	94		78-116		
Hexachlorobutadiene	67	U	67.	170	ug/kg	90		70-112		
Hexachlorocyclopentadiene	170 U		170.	500	ug/kg	80		46-115		
Hexachloroethane	17	U	17.	170	ug/kg	85		68-105		
Isophorone	17	U	17.	170	ug/kg	95		69-110		
2-Methylphenol	33	U	33.	170	ug/kg	100		66-110		
4-Methylphenol	33	U	33.	170	ug/kg	92		66-117		
2-Nitroaniline	17	U	17.	170	ug/kg	96		78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	94		62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	74		49-98		
Nitrobenzene	17	U	17.	170	ug/kg	94		71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	92		81-114		
4-Nitrophenol	170 U		170.	500	ug/kg	82		56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	92		63-107		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	98		67-141		
Di-n-octylphthalate	17	U	17.	170	ug/kg	95		68-130		
Pentachlorophenol	170 U		170.	500	ug/kg	86		35-106		
Phenol	17	U	17.	170	ug/kg	97		58-112		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	91		73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	96		76-107		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	95		78-111		
Batch number: 11020SLB026	Sample number(s): 6183546-6183557									
Acenaphthene	0.67	U	0.67	1.7	ug/kg	95		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	85		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	89		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	91		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	113		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	116		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	123		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	118		66-137		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	99		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	104		84-132		
Chrysene	0.33	U	0.33	1.7	ug/kg	91		79-120		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	132		62-142		
Diethylphthalate	6.0	U	6.0	18	ug/kg	93		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	91		70-130		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	96		78-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	93		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	128		62-141		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	84		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	78		62-120		
Naphthalene	0.67	U	0.67	1.7	ug/kg	84		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	78		39-148		
Di-n-octylphthalate	7.7	J	6.0	18	ug/kg	128		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	87		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	85		56-121		
Batch number: 110190027A	Sample number(s): 6183555-6183556									
2,4-D	1.2	U	1.2	3.6	ug/kg	88		40-140		
Dalapon	4.4	U	4.4	9.0	ug/kg	76		24-89		
2,4-DB	0.62	U	0.62	1.7	ug/kg	76		34-138		
Dicamba	0.40	U	0.40	1.2	ug/kg	70		20-164		
Dinoseb	0.80	U	0.80	2.4	ug/kg	5*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	94		60-141		
MCPA	76	U	76.	250	ug/kg	96		34-113		
MCPP (Mecoprop)	97	J	75.	250	ug/kg	92		29-154		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	90		33-145		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	76		48-138		
Batch number: 110200023A	Sample number(s): 6183557									
6a Perchlorate EPA 6850	2.1	U	2.1	5.0	ug/kg	106		85-115		
Batch number: 110170030A	Sample number(s): 6183546-6183557									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	67*	65*	75-125	2	30
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	99		72-120		
PCB-1221	0.50	U	0.50	1.7	ug/kg					
PCB-1232	0.52	U	0.52	1.7	ug/kg					
PCB-1242	0.50	U	0.50	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.33	U	0.33	1.7	ug/kg	122		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 110170031A	Sample number(s): 6183555-6183556									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Aldrin	0.066 U	0.066	0.17	ug/kg	124		44-135		
Alpha BHC	0.034 U	0.034	0.17	ug/kg	85		38-130		
Beta BHC	0.060 U	0.060	0.17	ug/kg	88		56-134		
Gamma BHC - Lindane	0.034 U	0.034	0.17	ug/kg	88		46-127		
Chlordane	0.80 U	0.80	3.4	ug/kg					
p,p-DDD	0.066 U	0.066	0.34	ug/kg	96		60-137		
p,p-DDE	0.066 U	0.066	0.34	ug/kg	126		59-141		
p,p-DDT	0.066 U	0.066	0.34	ug/kg	86		54-130		
Delta BHC	0.036 U	0.036	0.17	ug/kg	91		55-144		
Dieldrin	0.066 U	0.066	0.34	ug/kg	92		65-129		
Endosulfan I	0.044 U	0.044	0.17	ug/kg	73		45-123		
Endosulfan II	0.066 U	0.066	0.34	ug/kg	105		63-127		
Endosulfan Sulfate	0.066 U	0.066	0.34	ug/kg	122		72-138		
Endrin	0.066 U	0.066	0.34	ug/kg	91		62-129		
Endrin Aldehyde	0.066 U	0.066	0.34	ug/kg	88		55-132		
Endrin Ketone	0.066 U	0.066	0.34	ug/kg	138		69-139		
Heptachlor	0.060 U	0.060	0.17	ug/kg	91		43-124		
Heptachlor Epoxide	0.034 U	0.034	0.17	ug/kg	124		65-131		
Methoxychlor	0.34 U	0.34	1.7	ug/kg	85		59-125		
Mirex	0.066 U	0.066	0.34	ug/kg					
Toxaphene	2.2 U	2.2	6.6	ug/kg					
Batch number: 110180016A	Sample number(s): 6183558-6183559								
Aroclor 5432	0.10 U	0.10	0.50	ug/l					
Aroclor 5442	0.10 U	0.10	0.50	ug/l	44*	46*	75-125	4	30
Aroclor 5460	0.10 U	0.10	0.50	ug/l					
PCB-1016	0.10 U	0.10	0.50	ug/l	106	98	68-119	8	30
PCB-1221	0.10 U	0.10	0.50	ug/l					
PCB-1232	0.20 U	0.20	0.50	ug/l					
PCB-1242	0.10 U	0.10	0.50	ug/l					
PCB-1248	0.10 U	0.10	0.50	ug/l					
PCB-1254	0.10 U	0.10	0.50	ug/l					
PCB-1260	0.10 U	0.10	0.50	ug/l	136*	120	68-121	13	30
PCB-1262	0.20 U	0.20	0.50	ug/l					
PCB-1268	0.16 U	0.16	0.50	ug/l					
Batch number: 110171848002	Sample number(s): 6183558-6183559								
Aluminum	0.0834 U	0.0834	0.200	mg/l	98	98	90-112	0	20
Boron	0.0138 U	0.0138	0.0500	mg/l	92	91	90-110	2	20
Calcium	0.0702 U	0.0702	0.200	mg/l	101	100	90-112	0	20
Lithium	0.0024 U	0.0024	0.0200	mg/l	102	101	80-120	0	20
Magnesium	0.0172 U	0.0172	0.100	mg/l	95	94	89-110	0	20
Manganese	0.00084 U	0.00084	0.0050	mg/l	103	102	90-110	0	20
Phosphorus	0.0089 U	0.0089	0.100	mg/l	97	96	80-120	1	20
Potassium	0.239 U	0.239	0.500	mg/l	99	98	85-115	1	20
Sodium	0.433 U	0.433	1.00	mg/l	100	99	87-114	1	20
Strontium	0.00089 U	0.00089	0.0050	mg/l	100	98	90-110	2	20
Tin	0.0098 U	0.0098	0.0200	mg/l	98	98	90-110	1	20
Titanium	0.0038 U	0.0038	0.0100	mg/l	102	101	90-113	1	20
Zirconium	0.0206 U	0.0206	0.0500	mg/l	102	101	80-120	0	20
Batch number: 110175713003	Sample number(s): 6183558-6183559								
Mercury	0.000050 U	0.00005 0	0.00020	mg/l	96	89	80-120	8	20
Batch number: 110176050002A	Sample number(s): 6183558-6183559								
Antimony	0.00030 U	0.00030	0.0010	mg/l	96	107	87-110	11	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	100	107	86-111	7	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Beryllium	0.00013 U	0.00013	0.00050	mg/l	109	111	90-112	1	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	95	105	90-114	9	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	107	109	90-118	2	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	106	107	80-120	1	20
Copper	0.00038 U	0.00038	0.0020	mg/l	110	110	90-113	0	20
Lead	0.000052 U	0.00005 2	0.0010	mg/l	106	106	90-115	0	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	107	106	90-113	1	20
Silver	0.000080 U	0.00008 0	0.00050	mg/l	101	100	90-115	1	20
Thallium	0.00015 U	0.00015	0.00050	mg/l	104	100	89-116	4	20
Vanadium	0.00016 U	0.00016	0.00050	mg/l	104	106	80-120	2	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	114	106	80-120	8	20
Batch number: 110176050002B	Sample number(s): 6183558-6183559								
Selenium	0.00025 U	0.00025	0.0020	mg/l	100	102	85-114	2	20
Batch number: 110176050002C	Sample number(s): 6183558-6183559								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	100	100	80-120	0	20
Batch number: 110176050002D	Sample number(s): 6183558-6183559								
Barium	0.00053 U	0.00053	0.0020	mg/l	110	105	88-113	5	20
Batch number: 110191026001A	Sample number(s): 6183546-6183557								
Antimony	0.0600 U	0.0600	0.200	mg/kg	134		11-208		
Arsenic	0.0800 U	0.0800	0.400	mg/kg	99		80-120		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	105		82-118		
Cadmium	0.0400 U	0.0400	0.100	mg/kg	103		82-118		
Chromium	0.120 U	0.120	0.400	mg/kg	108		80-120		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	107		82-118		
Copper	0.0660 U	0.0660	0.400	mg/kg	104		80-120		
Lead	0.0104 U	0.0104	0.200	mg/kg	99		80-120		
Nickel	0.100 U	0.100	0.400	mg/kg	108		80-120		
Silver	0.0120 U	0.0120	0.100	mg/kg	98		66-134		
Thallium	0.0300 U	0.0300	0.100	mg/kg	102		81-119		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	98		90-110		
Zinc	0.560 U	0.560	3.00	mg/kg	100		78-122		
Batch number: 110191026001B	Sample number(s): 6183546-6183557								
Selenium	0.0400 U	0.0400	0.400	mg/kg	103		79-122		
Batch number: 110191026001C	Sample number(s): 6183546-6183557								
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	107		78-122		
Batch number: 110191026001D	Sample number(s): 6183546-6183557								
Barium	0.108 U	0.108	0.400	mg/kg	101		79-121		
Batch number: 110195708001	Sample number(s): 6183546-6183557								
Aluminum	5.03 U	5.03	20.0	mg/kg	90		61-110		
Boron	0.890 U	0.890	5.00	mg/kg	88		78-110		
Calcium	6.13 U	6.13	20.0	mg/kg	94		88-110		
Iron	4.71 U	4.71	20.0	mg/kg	101		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	101		80-120		
Magnesium	2.54 U	2.54	10.0	mg/kg	94		82-110		
Manganese	0.0780 U	0.0780	0.500	mg/kg	98		81-119		
Phosphorus	1.36 J	0.560	10.0	mg/kg	103		80-120		
Potassium	18.0 U	18.0	50.0	mg/kg	94		78-110		
Sodium	37.3 U	37.3	100	mg/kg	95		87-110		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Strontium	0.0620	U	0.0620	0.500	mg/kg	100		79-121		
Tin	1.00	U	1.00	10.0	mg/kg	102		90-114		
Titanium	0.380	U	0.380	1.00	mg/kg	94		80-120		
Zirconium	0.840	U	0.840	5.00	mg/kg	101		80-120		
Batch number: 110201848008	Sample number(s): 6183558-6183559									
Iron	0.0522	U	0.0522	0.200	mg/l	104	105	90-112	1	20
Batch number: 110215711003	Sample number(s): 6183546-6183557									
Mercury	0.0028	U	0.0028	0.0968	mg/kg	98		88-123		
Batch number: 11019196401B	Sample number(s): 6183558-6183559									
3b Cr VI by EPA 7199	5.0	U	5.0	10.0	ug/l	103	105	90-110	1	20
Batch number: 11019621701A	Sample number(s): 6183558-6183559									
7b Perchlorate EPA 314.0	0.70	U	0.70	2.0	ug/l	91		85-115		
Batch number: 11020621201A	Sample number(s): 6183546-6183549									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	94		85-115		
Batch number: 11020621201B	Sample number(s): 6183550-6183557									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	94		85-115		
Batch number: 11025025203A	Sample number(s): 6183546-6183555									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	96		90-110		
Batch number: 11025025203B	Sample number(s): 6183556-6183557									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	96		90-110		
Batch number: 11025243202A	Sample number(s): 6183546-6183557									
3a Cr VI by EPA 7199	0.20	U	0.20	1.0	mg/kg	96		80-120		
Batch number: 11026196602A	Sample number(s): 6183558-6183559									
11b Anions by 300.0 - Fluoride	0.080	U	0.080	0.10	mg/l	106	105	90-110	1	20
Batch number: 11018039402A	Sample number(s): 6183546-6183549									
22a pH by 9045C						100		95-105		
Batch number: 11018039402B	Sample number(s): 6183550-6183557									
22a pH by 9045C						100		95-105		
Batch number: 11018182102A	Sample number(s): 6183546-6183549									
32a OR Potential						99		98-102		
Batch number: 11018182102B	Sample number(s): 6183550-6183557									
32a OR Potential						99		98-102		
Batch number: 11019162401A	Sample number(s): 6183546-6183549									
28a Moisture Content by 160.3						100		80-120		
Batch number: 11019162401B	Sample number(s): 6183550-6183557									
28a Moisture Content by 160.3						100		80-120		

Sample Matrix Quality Control

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM
Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B110172AA	Sample number(s): 6183546-6183547,6183549,6183551,6183553-6183554,6183557 UNSPK: 6183546								
Acetone	117		15-210						
Benzene	101		55-143						
Bromobenzene	94		43-139						
Bromochloromethane	106		60-137						
Bromodichloromethane	96		53-136						
Bromoform	103		38-124						
Bromomethane	64		42-168						
2-Butanone	94		37-163						
n-Butylbenzene	87		30-146						
sec-Butylbenzene	88		33-157						
tert-Butylbenzene	87		41-152						
Carbon Tetrachloride	105		45-153						
Chlorobenzene	101		49-135						
Chloroethane	63		39-152						
2-Chloroethyl Vinyl Ether	85		32-139						
Chloroform	101		61-142						
Chloromethane	81		51-163						
2-Chlorotoluene	92		42-146						
4-Chlorotoluene	91		39-145						
1,2-Dibromo-3-chloropropane	78		30-139						
Dibromochloromethane	101		51-128						
1,2-Dibromoethane	100		54-129						
Dibromomethane	101		57-130						
1,2-Dichlorobenzene	94		36-133						
1,3-Dichlorobenzene	92		34-134						
1,4-Dichlorobenzene	93		35-136						
Dichlorodifluoromethane	70		26-151						
1,1-Dichloroethane	98		63-142						
1,2-Dichloroethane	99		68-131						
1,1-Dichloroethene	103		61-149						
cis-1,2-Dichloroethene	103		60-136						
trans-1,2-Dichloroethene	103		59-142						
1,2-Dichloropropane	95		62-135						
1,3-Dichloropropane	95		58-129						
2,2-Dichloropropane	102		53-147						
1,1-Dichloropropene	97		54-145						
cis-1,3-Dichloropropene	86		51-131						
trans-1,3-Dichloropropene	87		49-129						
Ethylbenzene	95		44-141						
Freon 113	103		56-156						
Hexachlorobutadiene	84		10-155						
2-Hexanone	66		32-160						
Isopropylbenzene	93		38-144						
p-Isopropyltoluene	90		29-152						
Methyl Tertiary Butyl Ether	94		55-129						
4-Methyl-2-pentanone	64		46-139						
Methylene Chloride	94		61-141						
n-Propylbenzene	92		39-157						
Styrene	99		35-134						
1,1,1,2-Tetrachloroethane	106		52-130						
1,1,2,2-Tetrachloroethane	86		40-152						
Tetrachloroethene	107		42-149						

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Toluene	100		50-146						
1,2,3-Trichlorobenzene	82		10-140						
1,2,4-Trichlorobenzene	77		10-136						
1,1,1-Trichloroethane	100		64-142						
1,1,2-Trichloroethane	102		54-139						
Trichloroethene	100		53-144						
Trichlorofluoromethane	87		47-163						
1,2,3-Trichloropropane	92		45-154						
1,2,4-Trimethylbenzene	90		37-149						
1,3,5-Trimethylbenzene	90		38-150						
Vinyl Chloride	78		50-154						
m+p-Xylene	101		44-137						
o-Xylene	91		42-137						
Batch number: E110171AA	Sample number(s): 6183546-6183547,6183549,6183551,6183553-6183554,6183557 UNSPK: P182855								
1,4-Dioxane	91	92	70-130	16	30				
Batch number: 11019SLA026	Sample number(s): 6183546-6183557 UNSPK: 6183546								
Aniline	70	74	14-114	5	30				
Benzidine	27*	33*	35-141	19	30				
Benzoic acid	57	58	10-173	1	30				
Benzyl alcohol	94	96	55-123	2	30				
4-Bromophenyl-phenylether	90	93	67-129	3	30				
Carbazole	95	95	64-120	0	30				
4-Chloro-3-methylphenol	94	94	53-130	0	30				
4-Chloroaniline	54	59	23-95	9	30				
bis(2-Chloroethoxy)methane	91	90	54-117	1	30				
bis(2-Chloroethyl)ether	89	90	60-116	0	30				
bis(2-Chloroisopropyl)ether	90	87	55-142	3	30				
2-Chloronaphthalene	76	76	50-141	1	30				
2-Chlorophenol	97	96	73-121	1	30				
4-Chlorophenyl-phenylether	93	95	64-119	2	30				
Dibenzofuran	94	95	71-112	1	30				
1,2-Dichlorobenzene	86	85	66-108	1	30				
1,3-Dichlorobenzene	84	83	63-109	0	30				
1,4-Dichlorobenzene	84	83	53-113	1	30				
3,3'-Dichlorobenzidine	48	52	25-123	8	30				
2,4-Dichlorophenol	95	95	78-117	0	30				
2,4-Dimethylphenol	94	93	56-130	1	30				
3,5-Dimethylphenol	105	107	70-130	2	30				
4,6-Dinitro-2-methylphenol	83	81	10-148	3	30				
2,4-Dinitrophenol	70	66	20-143	6	30				
2,4-Dinitrotoluene	95	98	57-114	3	30				
2,6-Dinitrotoluene	96	97	69-123	1	30				
1,2-Diphenylhydrazine	96	98	71-129	2	30				
bis(2-Ethylhexyl)phthalate	92	93	63-122	0	30				
Hexachlorobenzene	90	92	61-111	2	30				
Hexachlorobutadiene	87	85	62-120	2	30				
Hexachlorocyclopentadiene	79	81	10-153	3	30				
Hexachloroethane	81	80	57-109	1	30				
Isophorone	91	91	51-118	0	30				
2-Methylphenol	98	98	47-142	0	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
4-Methylphenol	92	93	55-126	1	30				
2-Nitroaniline	96	98	67-125	1	30				
3-Nitroaniline	95	96	59-122	1	30				
4-Nitroaniline	79	77	52-112	3	30				
Nitrobenzene	90	90	51-114	1	30				
2-Nitrophenol	92	92	74-115	0	30				
4-Nitrophenol	79	77	39-133	2	30				
N-Nitroso-di-n-propylamine	91	91	60-116	1	30				
N-Nitrosodiphenylamine	93	95	86-145	3	30				
Di-n-octylphthalate	95	95	56-126	0	30				
Pentachlorophenol	87	85	17-149	1	30				
Phenol	95	97	58-126	2	30				
1,2,4-Trichlorobenzene	90	89	72-115	1	30				
2,4,5-Trichlorophenol	93	97	34-139	4	30				
2,4,6-Trichlorophenol	93	93	49-140	1	30				
Batch number: 11020SLB026	Sample number(s): 6183546-6183557 UNSPK: 6183546								
Acenaphthene	91	89	63-105	3	30				
Acenaphthylene	85	84	55-126	2	30				
Anthracene	89	90	46-136	2	30				
Benzo(a)anthracene	88	91	39-144	3	30				
Benzo(a)pyrene	108	114	34-156	5	30				
Benzo(b)fluoranthene	110	116	43-155	5	30				
Benzo(g,h,i)perylene	91	102	33-141	11	30				
Benzo(k)fluoranthene	111	117	42-144	5	30				
Butylbenzylphthalate	98	101	73-140	3	30				
Di-n-butylphthalate	99	103	78-160	4	30				
Chrysene	88	90	29-156	2	30				
Dibenz(a,h)anthracene	108	113	41-130	4	30				
Diethylphthalate	93	94	87-131	0	30				
Dimethylphthalate	92	90	74-118	2	30				
Fluoranthene	92	95	26-166	4	30				
Fluorene	93	91	45-121	2	30				
Indeno(1,2,3-cd)pyrene	104	108	21-143	4	30				
1-Methylnaphthalene	85	81	72-123	4	30				
2-Methylnaphthalene	77	73	28-121	5	30				
Naphthalene	83	81	61-102	3	30				
N-Nitrosodimethylamine	96	91	48-113	5	30				
Di-n-octylphthalate	102	107	40-192	4	30				
Phenanthrene	85	88	12-165	3	30				
Pyrene	81	83	15-153	2	30				
Batch number: 110190027A	Sample number(s): 6183555-6183556 UNSPK: 6183555								
2,4-D	90	57	28-161	45*	35				
Dalapon	47	33	12-86	34	50				
2,4-DB	123	0*	20-170	200*	50				
Dicamba	118	159*	33-120	30	50				
Dinoseb	22	17	1-44	21	35				
2,4-DP (Dichlorprop)	64	95	55-141	39	50				
MCPA	91	74	31-184	21	50				
MCPP (Mecoprop)	0*	0*	16-174	0	50				
2,4,5-T	59	95	25-132	47*	35				
2,4,5-TP	82	87	10-183	6	35				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 110200023A	Sample number(s): 6183557 UNSPK: P182836								
6a Perchlorate EPA 6850	106	105	80-120	1	20				
Batch number: 110170030A	Sample number(s): 6183546-6183557 UNSPK: 6183546								
PCB-1016	81	85	29-146	4	50				
PCB-1260	117	116	39-149	1	50				
Batch number: 110170031A	Sample number(s): 6183555-6183556 UNSPK: P178512								
Aldrin	100	100	16-126	0	50				
Alpha BHC	70	70	10-129	0	50				
Beta BHC	75	81	14-147	8	50				
Gamma BHC - Lindane	73	73	10-140	0	50				
p,p-DDD	70	76	16-163	8	50				
p,p-DDE	88	129	18-161	28	50				
p,p-DDT	63	66	10-176	4	50				
Delta BHC	75	78	23-140	4	50				
Dieldrin	65	65	19-154	0	50				
Endosulfan I	45	48	16-137	6	50				
Endosulfan II	82	80	28-154	2	50				
Endosulfan Sulfate	97	97	21-160	0	50				
Endrin	65	65	11-149	0	50				
Endrin Aldehyde	64	67	10-148	5	35				
Endrin Ketone	95	114	22-165	17	50				
Heptachlor	73	73	13-126	0	50				
Heptachlor Epoxide	91	94	13-157	3	50				
Methoxychlor	79	81	32-147	3	50				
Batch number: 110191026001A	Sample number(s): 6183546-6183557 UNSPK: P182836 BKG: P182836								
Antimony	34*	33*	75-125	2	20	0.193 J	0.140 J	32* (1)	20
Arsenic	113	96	75-125	5	20	4.51	4.34	4	20
Beryllium	97	81	75-125	9	20	0.700	0.666	5	20
Cadmium	99	101	75-125	2	20	0.0829 J	0.0965 J	15 (1)	20
Chromium	105	89	75-125	6	20	17.3	17.4	0	20
Cobalt	91	90	75-125	1	20	5.30	4.93	7	20
Copper	94	97	75-125	2	20	6.55	6.93	6	20
Lead	105	98	75-125	2	20	6.17	5.73	7	20
Nickel	97	91	75-125	3	20	10.7	10.6	1	20
Silver	105	101	75-125	4	20	0.0343 J	0.0502 J	38* (1)	20
Thallium	104	103	75-125	0	20	0.225	0.217	3 (1)	20
Vanadium	129*	92	75-125	8	20	33.0	32.6	1	20
Zinc	98 (2)	91 (2)	75-125	1	20	42.4	44.7	5	20
Batch number: 110191026001B	Sample number(s): 6183546-6183557 UNSPK: P182836 BKG: P182836								
Selenium	86	90	75-125	4	20	0.121 J	0.0586 J	70* (1)	20
Batch number: 110191026001C	Sample number(s): 6183546-6183557 UNSPK: P182836 BKG: P182836								
Molybdenum	103	97	75-125	5	20	0.597	0.557	7	20
Batch number: 110191026001D	Sample number(s): 6183546-6183557 UNSPK: P182836 BKG: P182836								
Barium	174 (2)	34 (2)	75-125	13	20	92.6	91.6	1	20
Batch number: 110195708001	Sample number(s): 6183546-6183557 UNSPK: P182836 BKG: P182836								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Aluminum	2916 (2)	2165 (2)	75-125	7	20	19,700	18,600	6	20
Boron	96	94	84-115	5	20	0.873 U	0.864 U	0 (1)	20
Calcium	-191 (2)	-226 (2)	75-125	3	20	4,200	2,630	46*	20
Iron	2136 (2)	1901 (2)	75-125	1	20	20,000	19,200	5	20
Lithium	104	102	82-114	4	20	20.6	20.3	1	20
Magnesium	292 (2)	253 (2)	75-125	2	20	3,770	3,650	3	20
Manganese	158 (2)	98 (2)	75-125	11	20	229	234	2	20
Phosphorus	101	114	75-125	3	20	180	185	3	20
Potassium	135*	135*	75-125	1	20	1,700	1,920	12	20
Sodium	97	97	75-125	3	20	189	153	21* (1)	20
Strontium	97	95	75-115	4	20	26.3	22.5	16	20
Tin	90	89	80-110	4	20	2.34 J	2.37 J	1 (1)	20
Titanium	249 (2)	241 (2)	75-125	1	20	1,050	1,050	0	20
Zirconium	97	96	75-125	3	20	2.68 J	2.96 J	10 (1)	20
Batch number: 110215711003	Sample number(s): 6183546-6183557 UNSPK: P182836 BKG: P182836								
Mercury	120	117	65-135	2	20	0.0262 J	0.0294 J	12 (1)	20
Batch number: 11019621701A	Sample number(s): 6183558-6183559 UNSPK: P177278 BKG: P177278								
7b Perchlorate EPA 314.0	96		80-120			0.70 U	0.70 U	0 (1)	15
Batch number: 11020621201A	Sample number(s): 6183546-6183549 UNSPK: P182855 BKG: P182855								
7a Perchlorate EPA 314.0	101		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11020621201B	Sample number(s): 6183550-6183557 UNSPK: 6183550 BKG: 6183550								
7a Perchlorate EPA 314.0	105		80-120			9.0 U	9.0 U	0 (1)	15
Batch number: 11025025203A	Sample number(s): 6183546-6183555 UNSPK: 6183546 BKG: 6183546								
11a Anions by 300.0 - Fluoride	85		80-120			6.4	6.3	0	20
Batch number: 11025025203B	Sample number(s): 6183556-6183557 UNSPK: 6183556 BKG: 6183556								
11a Anions by 300.0 - Fluoride	79*		80-120			1.4	1.0	31* (1)	20
Batch number: 11025243202A	Sample number(s): 6183546-6183557 UNSPK: 6183551 BKG: 6183551								
3a Cr VI by EPA 7199	94		75-125			0.20 U	0.20 U	0 (1)	20
Batch number: 11018039402A	Sample number(s): 6183546-6183549 BKG: P182859								
22a pH by 9045C						7.25	7.25	0	1
Batch number: 11018039402B	Sample number(s): 6183550-6183557 BKG: 6183550								
22a pH by 9045C						6.81	6.80	0	1
Batch number: 11018182102A	Sample number(s): 6183546-6183549 BKG: P182859								
32a OR Potential						390	390	0	6
Batch number: 11018182102B	Sample number(s): 6183550-6183557 BKG: 6183550								
32a OR Potential						348	348	0	6
Batch number: 11019162401A	Sample number(s): 6183546-6183549 BKG: 6183549								
28a Moisture Content by 160.3						13.8	13.9	1	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11019162401B	Sample number(s): 6183550-6183557					BKG: 6183552			
28a Moisture Content by 160.3						23.0	22.7	1	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 1a Volatile Organics EPA 8260B
Batch number: B110172AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6183546	112	113	95	88
6183547	110	106	96	85
6183549	111	105	96	82
6183551	109	106	97	85
6183553	111	107	94	85
6183554	113	109	95	85
6183557	111	105	95	85
Blank	108	107	95	85
LCS	103	107	101	101
LCSD	102	108	101	100
MS	103	107	101	100
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 14a 1,4-Dioxane by 8260B SIM
Batch number: E110171AA

	Toluene-d8
6183546	98
6183547	99
6183549	99
6183551	99
6183553	98
6183554	99
6183557	99
Blank	99
LCS	100
LCSD	100
MS	99
MSD	99
Limits:	70-130

Analysis Name: 14b 1,4-Dioxane by 8260B SIM
Batch number: E110191AA

	Toluene-d8

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Surrogate Quality Control

6183560	101			
Blank	100			
LCS	100			
LCSD	100			
Limits:	80-120			

Analysis Name: 1b Volatile Organics EPA8260
Batch number: Y110141AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6183560	107	100	98	98
Blank	104	98	99	100
LCS	106	102	100	102
LCSD	106	105	100	102
Limits:	86-118	80-120	88-110	86-115

Analysis Name: 4b Select SVOC EPA 8270SIM
Batch number: 11017WAD026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6183558	126	90	98
6183559	131	89	91
Blank	88	90	93
LCS	114	95	94
LCSD	103	95	93
Limits:	40-130	45-130	45-135

Analysis Name: 5b Semivolatiles by EPA 8270C
Batch number: 11018WAA026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6183558	51	32	94	87	88	92
6183559	48	31	91	83	88	89
Blank	42	25	86	81	83	82
LCS	52	32	95	92	95	91
LCSD	60	39	95	91	95	92
Limits:	20-130	20-120	30-130	40-130	45-130	45-135

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 11019SLA026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6183546	90	89	89	85	87	81
6183547	84	84	86	79	81	83
6183548	92	91	93	87	90	87
6183549	86	84	89	79	82	83
6183550	85	84	83	79	81	82
6183551	92	90	88	84	85	88
6183552	86	85	85	78	80	86
6183553	91	89	92	86	89	88
6183554	87	87	87	81	83	84
6183555	91	91	87	86	91	95
6183556	87	84	91	80	85	93

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Surrogate Quality Control

6183557	87	86	83	83	85	89
Blank	94	94	96	88	89	86
LCS	93	93	92	88	91	85
MS	94	94	93	87	90	86
MSD	95	93	94	86	92	88
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 11020SLB026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6183546	87	82	93
6183547	95	82	92
6183548	87	79	83
6183549	92	86	85
6183550	96	87	88
6183551	92	85	84
6183552	101	88	83
6183553	88	84	87
6183554	95	87	87
6183555	110	93	117
6183556	106	88	90
6183557	89	81	89
Blank	84	83	90
LCS	100	86	86
MS	116	88	85
MSD	101	82	84
Limits:	40-130	45-130	45-135

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 110170030A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6183546	82	112
6183547	92	111
6183548	87	106
6183549	91	120
6183550	104	138*
6183551	101	128*
6183552	75	108
6183553	91	131*
6183554	88	135*
6183555	87	146*
6183556	88	152*
6183557	90	140*
Blank	112	126*
LCS	119	118
LCSD	100	114
MS	92	129*
MSD	101	131*
Limits:	53-139	45-120

Analysis Name: 12a Pesticides by 8081A
Batch number: 110170031A

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229054
Reported: 02/08/11 at 01:21 PM

Surrogate Quality Control

	Tetrachloro-m-xylene	Decachlorobiphenyl
6183555	36*	22
6183556	71	74
Blank	91	105
LCS	92	106
MS	83	74
MSD	91	82
Limits:	50-130	20-120

Analysis Name: 8b PCBs/PCTs by 8082
Batch number: 110180016A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6183558	95	91
6183559	85	84
Blank	86	80
LCS	103	93
LCSD	100	110
Limits:	30-150	45-120

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 110190027A

	2,4-Dichlorophenylacetic acid
6183555	86
6183556	98
Blank	86
LCS	86
MS	82
MSD	79
Limits:	36-156

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

13013 1229054 6183546-60

CHAIN OF CUSTODY RECORD

CDM | SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers Signature:

						PRIMARY FOR ALL LOCATIONS								SS ONLY		VOCs			SECONDARY FOR ALL LOCATIONS										Other Instructions and Notes
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020/7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7196@	Perchlorate Confirmation by EPA 6850 (10%)	*Pesticides EPA 8081A (surface soil only)	**Herbicides EPA 8151 (surface soil only)	VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	TPH-GRO EPA 8015B	**pH EPA 9045C	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	
SL-073-SA5B-SB-4.0-5.0	01.13.1	1231	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																	
SL-073-SA5B-SB-4.5	01.13.1	1227	SOIL	NONE	4 ENCORES											X	X												
SL-301-SA5B-SB-4.0-5.0	01.13.1	0945	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																	
SL-301-SA5B-SB-4.5	01.13.1	0941	SOIL	NONE	4 ENCORES											X	X												
SL-301-SA5B-SB-7.5-8.5	01.13.1	0948	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																	
SL-074-SA5B-SB-4.0-5.0	01.13.1	1111	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																	
SL-074-SA5B-SB-4.5	01.13.1	1109	SOIL	NONE	4 ENCORES											X	X												
SL-074-SA5B-SB-7.0-8.0	01.13.1	1116	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																	
SL-121-SA5B-SB-4.0-5.0	01.13.1	1022	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																	
SL-121-SA5B-SB-4.5	01.13.1	1018	SOIL	NONE	4 ENCORES											X	X												
SL-121-SA5B-SB-9.0-10.0	01.13.1	1027	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																	
SL-120-SA5B-SB-3.0-4.0	01.13.1	1125	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																	
SL-120-SA5B-SB-3.5	01.13.1	1120	SOIL	NONE	4 ENCORES											X	X												
SL-119-SA5B-SB-3.0-4.0	01.13.1	0853	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																	
SL-119-SA5B-SB-3.5	01.13.1	0849	SOIL	NONE	4 ENCORES											X	X												
SED-009-SIV-SD-0.0-0.5	01.13.1	0945	SOIL	NONE	1 16 oz. jar & 1 6" sleeve	X	X	X	X	X	X	X		X	X														
SED-028-SIV-SD-0.0-0.5	01.13.1	1115	SOIL	NONE	1 16 oz. jar & 1 6" sleeve	X	X	X	X	X	X	X		X	X														
SL-122-SA5B-SB-2.0-3.0	01.13.1	1339	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X	X																
SL-122-SA5B-SB-2.5	01.13.1	1334	SOIL	NONE	4 ENCORES											X	X												
EB20-SA5B-011311	01.13.1	1300	WATER	NONE	4 1L AMBER BOTTLES			X	X	X																			
EB20-SA5B-011311	01.13.1	1300	WATER	NONE	1 - 500 mL POLY		X				X	X																	
EB20-SA5B-011311	01.13.1	1300	WATER	HNO3	1 - 500 mL POLY	X																							
EB21-SA5B-011311	01.13.1	1155	WATER	NONE	4 1L AMBER BOTTLES			X	X	X																			
EB21-SA5B-011311	01.13.1	1155	WATER	NONE	1 - 500 mL POLY		X				X	X																	
EB21-SA5B-011311	01.13.1	1155	WATER	HNO3	1 - 500 mL POLY	X																							
TB-011311	01.13.1	0800	WATER	HCl	3-40 mL VOA VIALS											X	X												

Relinquished by: (Signature) — Date/Time: 1/13/2011, 17:00 — Received for Laboratory by: (Signature) — 1/14/11 — 845

Received by: (Signature) — Date/Time — Airbill No.(s): 8695 1431 9917, ...9925, ...9939

Laboratory: Lancaster Laboratories, Inc.

No. of coolers = 3

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

March 01, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 01/14/2011
Group Number: 1229059
SDG: DX038
PO Number: 1203-004-007-AL
Release Number: TRACKING #11667
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-121-SA5B-SB-4.0-5.0 Soil	6183573
SL-121-SA5B-SB-9.0-10.0 Soil	6183574
SL-120-SA5B-SB-3.0-4.0 Soil	6183575
SL-119-SA5B-SB-3.0-4.0 Soil	6183576
SED-009-SIV-SD-0.0-0.5 Sediment	6183577
SED-028-SIV-SD-0.0-0.5 Sediment	6183578
SL-122-SA5B-SB-2.0-3.0 Soil	6183579
EB20-SA5B-011311 Water	6183580
EB21-SA5B-011311 Water	6183581

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	CDM Federal Services Program	Attn: Todd Burgesser
1 COPY TO	Data Package Group	

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183573
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1214 SDG#: DX038-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	7.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183573
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1214 SDG#: DX038-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0336	U	0.0336	1.08	1
11031	12378-PeCDD	40321-76-4	0.0256	U	0.0256	5.41	1
11031	123478-HxCDD	39227-28-6	0.0209	U	0.0209	5.41	1
11031	123678-HxCDD	57653-85-7	0.0269	JQ	0.0215	5.41	1
11031	123789-HxCDD	19408-74-3	0.142	J	0.0211	5.41	1
11031	1234678-HpCDD	35822-46-9	0.218	JBQ	0.0304	5.41	1
11031	OCDD	3268-87-9	1.12	JB	0.0325	10.8	1
11031	2378-TCDF	51207-31-9	0.0332	U	0.0332	1.08	1
11031	12378-PeCDF	57117-41-6	0.0150	U	0.0150	5.41	1
11031	23478-PeCDF	57117-31-4	0.0329	JQ	0.0148	5.41	1
11031	123478-HxCDF	70648-26-9	0.0285	JB	0.0137	5.41	1
11031	123678-HxCDF	57117-44-9	0.0201	JBQ	0.0123	5.41	1
11031	123789-HxCDF	72918-21-9	0.133	JBQ	0.0137	5.41	1
11031	234678-HxCDF	60851-34-5	0.0357	JB	0.0125	5.41	1
11031	1234678-HpCDF	67562-39-4	0.106	JBQ	0.0111	5.41	1
11031	1234789-HpCDF	55673-89-7	0.0261	JBQ	0.0162	5.41	1
11031	OCDF	39001-02-0	0.131	JBQ	0.0402	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	79	28 - 130
13C12-1234678-HpCDD	85	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	74	26 - 152
13C12-123678-HxCDF	80	26 - 123
13C12-234678-HxCDF	77	28 - 136
13C12-123789-HxCDF	83	29 - 147
13C12-1234678-HpCDF	91	28 - 143
13C12-1234789-HpCDF	78	26 - 138
13C12-OCDF	77	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-121-SA5B-SB-4.0-5.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183573
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1214 SDG#: DX038-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-4.0-5.0

LLI Sample # SW 6183573
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:22

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1214 SDG#: DX038-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 14:06	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183574
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1219 SDG#: DX038-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	23.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183574
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1219 SDG#: DX038-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0640	U	0.0640	1.30	1
11031	12378-PeCDD	40321-76-4	0.0708	JQ	0.0500	6.49	1
11031	123478-HxCDD	39227-28-6	0.0465	U	0.0465	6.49	1
11031	123678-HxCDD	57653-85-7	0.0730	JQ	0.0494	6.49	1
11031	123789-HxCDD	19408-74-3	0.0733	JQ	0.0473	6.49	1
11031	1234678-HpCDD	35822-46-9	0.369	JBQ	0.0639	6.49	1
11031	OCDD	3268-87-9	0.943	JB	0.0394	13.0	1
11031	2378-TCDF	51207-31-9	0.0619	U	0.0619	1.30	1
11031	12378-PeCDF	57117-41-6	0.0284	U	0.0284	6.49	1
11031	23478-PeCDF	57117-31-4	0.0657	JQ	0.0270	6.49	1
11031	123478-HxCDF	70648-26-9	0.0226	U	0.0226	6.49	1
11031	123678-HxCDF	57117-44-9	0.0525	JB	0.0204	6.49	1
11031	123789-HxCDF	72918-21-9	0.0390	JBQ	0.0239	6.49	1
11031	234678-HxCDF	60851-34-5	0.0354	JBQ	0.0210	6.49	1
11031	1234678-HpCDF	67562-39-4	0.124	JB	0.0195	6.49	1
11031	1234789-HpCDF	55673-89-7	0.0386	JBQ	0.0270	6.49	1
11031	OCDF	39001-02-0	0.158	JB	0.0629	13.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	79	25 - 181
13C12-123478-HxCDD	74	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	79	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	78	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	76	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	77	29 - 147
13C12-1234678-HpCDF	81	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	84	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183574
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1219 SDG#: DX038-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-121-SA5B-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-121-SA5B-SB-9.0-10.0

LLI Sample # SW 6183574
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 10:27

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D1219 SDG#: DX038-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 15:03	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183575
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DS120 SDG#: DX038-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	8.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183575
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DS120 SDG#: DX038-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0446	U	0.0446	1.10	1
11031	12378-PeCDD	40321-76-4	0.0551	JQ	0.0442	5.49	1
11031	123478-HxCDD	39227-28-6	0.0421	JQ	0.0338	5.49	1
11031	123678-HxCDD	57653-85-7	0.0544	JQ	0.0366	5.49	1
11031	123789-HxCDD	19408-74-3	0.0957	JQ	0.0348	5.49	1
11031	1234678-HpCDD	35822-46-9	0.295	JB	0.0420	5.49	1
11031	OCDD	3268-87-9	0.757	JB	0.0338	11.0	1
11031	2378-TCDF	51207-31-9	0.0411	U	0.0411	1.10	1
11031	12378-PeCDF	57117-41-6	0.0322	JQ	0.0195	5.49	1
11031	23478-PeCDF	57117-31-4	0.0688	JQ	0.0200	5.49	1
11031	123478-HxCDF	70648-26-9	0.0429	JBQ	0.0184	5.49	1
11031	123678-HxCDF	57117-44-9	0.0319	JBQ	0.0161	5.49	1
11031	123789-HxCDF	72918-21-9	0.0354	JB	0.0188	5.49	1
11031	234678-HxCDF	60851-34-5	0.0440	JB	0.0173	5.49	1
11031	1234678-HpCDF	67562-39-4	0.122	JBQ	0.0150	5.49	1
11031	1234789-HpCDF	55673-89-7	0.0263	JBQ	0.0212	5.49	1
11031	OCDF	39001-02-0	0.201	JB	0.0532	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	76	25 - 164
13C12-12378-PeCDD	85	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	81	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	88	23 - 140
13C12-OCDD	90	17 - 157
13C12-2378-TCDF	76	24 - 169
13C12-12378-PeCDF	90	24 - 185
13C12-23478-PeCDF	85	21 - 178
13C12-123478-HxCDF	75	26 - 152
13C12-123678-HxCDF	86	26 - 123
13C12-234678-HxCDF	81	28 - 136
13C12-123789-HxCDF	88	29 - 147
13C12-1234678-HpCDF	93	28 - 143
13C12-1234789-HpCDF	83	26 - 138
13C12-OCDF	81	17 - 157
13C12-1278-TCDD (CRS)	91	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-120-SA5B-SB-3.0-4.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183575
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DS120 SDG#: DX038-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-120-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-120-SA5B-SB-3.0-4.0

LLI Sample # SW 6183575
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:25

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DS120 SDG#: DX038-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 19:03	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183576
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DS119 SDG#: DX038-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	11.2	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183576
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DS119 SDG#: DX038-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0425	U	0.0425	1.13	1
11031	12378-PeCDD	40321-76-4	0.0336	U	0.0336	5.63	1
11031	123478-HxCDD	39227-28-6	0.0265	U	0.0265	5.63	1
11031	123678-HxCDD	57653-85-7	0.0347	JQ	0.0261	5.63	1
11031	123789-HxCDD	19408-74-3	0.0680	JQ	0.0273	5.63	1
11031	1234678-HpCDD	35822-46-9	0.214	JBQ	0.0410	5.63	1
11031	OCDD	3268-87-9	0.808	JB	0.0343	11.3	1
11031	2378-TCDF	51207-31-9	0.0393	U	0.0393	1.13	1
11031	12378-PeCDF	57117-41-6	0.0519	JQ	0.0197	5.63	1
11031	23478-PeCDF	57117-31-4	0.0930	JQ	0.0186	5.63	1
11031	123478-HxCDF	70648-26-9	0.0376	JBQ	0.0186	5.63	1
11031	123678-HxCDF	57117-44-9	0.0324	JBQ	0.0164	5.63	1
11031	123789-HxCDF	72918-21-9	0.0460	JBQ	0.0186	5.63	1
11031	234678-HxCDF	60851-34-5	0.0483	JB	0.0179	5.63	1
11031	1234678-HpCDF	67562-39-4	0.126	JB	0.0125	5.63	1
11031	1234789-HpCDF	55673-89-7	0.0176	U	0.0176	5.63	1
11031	OCDF	39001-02-0	0.238	JBQ	0.0453	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	83	25 - 181
13C12-123478-HxCDD	76	32 - 141
13C12-123678-HxCDD	77	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	83	17 - 157
13C12-2378-TCDF	70	24 - 169
13C12-12378-PeCDF	85	24 - 185
13C12-23478-PeCDF	84	21 - 178
13C12-123478-HxCDF	72	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	75	28 - 136
13C12-123789-HxCDF	84	29 - 147
13C12-1234678-HpCDF	87	28 - 143
13C12-1234789-HpCDF	79	26 - 138
13C12-OCDF	76	17 - 157
13C12-1278-TCDD (CRS)	91	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-119-SA5B-SB-3.0-4.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183576
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DS119 SDG#: DX038-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-119-SA5B-SB-3.0-4.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-119-SA5B-SB-3.0-4.0

LLI Sample # SW 6183576
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 08:53

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DS119 SDG#: DX038-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 19:59	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183577
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD009 SDG#: DX038-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	23.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183577
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD009 SDG#: DX038-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0507	U	0.0507	1.31	1
11031	12378-PeCDD	40321-76-4	0.245	JQ	0.0590	6.54	1
11031	123478-HxCDD	39227-28-6	0.183	JQ	0.0590	6.54	1
11031	123678-HxCDD	57653-85-7	0.490	JQ	0.0620	6.54	1
11031	123789-HxCDD	19408-74-3	0.354	JQ	0.0575	6.54	1
11031	1234678-HpCDD	35822-46-9	7.27	B	0.0629	6.54	1
11031	OCDD	3268-87-9	54.6	B	0.0522	13.1	1
11031	2378-TCDF	51207-31-9	0.338	JQ	0.162	1.31	1
11031	12378-PeCDF	57117-41-6	0.618	J	0.0618	6.54	1
11031	23478-PeCDF	57117-31-4	0.956	J	0.0582	6.54	1
11031	123478-HxCDF	70648-26-9	0.531	JBQ	0.0460	6.54	1
11031	123678-HxCDF	57117-44-9	0.282	JBQ	0.0401	6.54	1
11031	123789-HxCDF	72918-21-9	0.0676	JBQ	0.0452	6.54	1
11031	234678-HxCDF	60851-34-5	0.275	JBQ	0.0405	6.54	1
11031	1234678-HpCDF	67562-39-4	1.52	JB	0.0378	6.54	1
11031	1234789-HpCDF	55673-89-7	0.158	JB	0.0489	6.54	1
11031	OCDF	39001-02-0	2.84	JB	0.0610	13.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	93	25 - 164
13C12-12378-PeCDD	101	25 - 181
13C12-123478-HxCDD	94	32 - 141
13C12-123678-HxCDD	95	28 - 130
13C12-123789-HxCDD	97	28 - 130
13C12-1234678-HpCDD	103	23 - 140
13C12-OCDD	103	17 - 157
13C12-2378-TCDF	93	24 - 169
13C12-12378-PeCDF	104	24 - 185
13C12-23478-PeCDF	105	21 - 178
13C12-123478-HxCDF	88	26 - 152
13C12-123678-HxCDF	97	26 - 123
13C12-234678-HxCDF	96	28 - 136
13C12-123789-HxCDF	104	29 - 147
13C12-1234678-HpCDF	101	28 - 143
13C12-1234789-HpCDF	101	26 - 138
13C12-OCDF	98	17 - 157
13C12-1278-TCDD (CRS)	105	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-009-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183577
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD009 SDG#: DX038-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-009-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-009-SIV-SD-0.0-0.5

LLI Sample # SW 6183577
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 09:45

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD009 SDG#: DX038-16

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 20:56	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183578
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD028 SDG#: DX038-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	29.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183578
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD028 SDG#: DX038-17

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0460	U	0.0460	1.42	1
11031	12378-PeCDD	40321-76-4	0.0453	U	0.0453	7.08	1
11031	123478-HxCDD	39227-28-6	0.123	J	0.0441	7.08	1
11031	123678-HxCDD	57653-85-7	0.226	J	0.0443	7.08	1
11031	123789-HxCDD	19408-74-3	0.156	J	0.0452	7.08	1
11031	1234678-HpCDD	35822-46-9	2.91	JB	0.0559	7.08	1
11031	OCDD	3268-87-9	31.3	B	0.0508	14.2	1
11031	2378-TCDF	51207-31-9	0.0948	J	0.0707	1.42	1
11031	12378-PeCDF	57117-41-6	0.206	J	0.0320	7.08	1
11031	23478-PeCDF	57117-31-4	0.266	JQ	0.0313	7.08	1
11031	123478-HxCDF	70648-26-9	0.163	JBQ	0.0303	7.08	1
11031	123678-HxCDF	57117-44-9	0.0995	JBQ	0.0266	7.08	1
11031	123789-HxCDF	72918-21-9	0.0317	U	0.0317	7.08	1
11031	234678-HxCDF	60851-34-5	0.137	JBQ	0.0279	7.08	1
11031	1234678-HpCDF	67562-39-4	0.663	JB	0.0235	7.08	1
11031	1234789-HpCDF	55673-89-7	0.0991	JBQ	0.0343	7.08	1
11031	OCDF	39001-02-0	1.72	JB	0.0690	14.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	83	25 - 164
13C12-12378-PeCDD	97	25 - 181
13C12-123478-HxCDD	90	32 - 141
13C12-123678-HxCDD	93	28 - 130
13C12-123789-HxCDD	88	28 - 130
13C12-1234678-HpCDD	90	23 - 140
13C12-OCDD	89	17 - 157
13C12-2378-TCDF	87	24 - 169
13C12-12378-PeCDF	95	24 - 185
13C12-23478-PeCDF	91	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	87	26 - 123
13C12-234678-HxCDF	83	28 - 136
13C12-123789-HxCDF	88	29 - 147
13C12-1234678-HpCDF	98	28 - 143
13C12-1234789-HpCDF	84	26 - 138
13C12-OCDF	77	17 - 157
13C12-1278-TCDD (CRS)	92	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SED-028-SIV-SD-0.0-0.5 Sediment**
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183578
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD028 SDG#: DX038-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-028-SIV-SD-0.0-0.5 Sediment
SSFL Area IV Collocated Soil Sampling
SED-028-SIV-SD-0.0-0.5

LLI Sample # SW 6183578
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:15

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DD028 SDG#: DX038-17

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 21:53	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183579
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DS122 SDG#: DX038-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	28a Moisture Content by 160.3	n.a.	13.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183579
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DS122 SDG#: DX038-18

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0534	U	0.0534	1.16	1
11031	12378-PeCDD	40321-76-4	0.0513	JQ	0.0388	5.79	1
11031	123478-HxCDD	39227-28-6	0.0468	U	0.0468	5.79	1
11031	123678-HxCDD	57653-85-7	0.466	JQ	0.0468	5.79	1
11031	123789-HxCDD	19408-74-3	0.560	JQ	0.0446	5.79	1
11031	1234678-HpCDD	35822-46-9	0.411	JBQ	0.0571	5.79	1
11031	OCDD	3268-87-9	4.24	JB	0.0490	11.6	1
11031	2378-TCDF	51207-31-9	0.0414	U	0.0414	1.16	1
11031	12378-PeCDF	57117-41-6	0.0200	U	0.0200	5.79	1
11031	23478-PeCDF	57117-31-4	0.0554	JQ	0.0195	5.79	1
11031	123478-HxCDF	70648-26-9	0.0370	JBQ	0.0226	5.79	1
11031	123678-HxCDF	57117-44-9	0.121	JBQ	0.0196	5.79	1
11031	123789-HxCDF	72918-21-9	0.105	JB	0.0238	5.79	1
11031	234678-HxCDF	60851-34-5	0.0221	JBQ	0.0202	5.79	1
11031	1234678-HpCDF	67562-39-4	0.124	JB	0.0138	5.79	1
11031	1234789-HpCDF	55673-89-7	0.0358	JB	0.0212	5.79	1
11031	OCDF	39001-02-0	0.418	JB	0.0530	11.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	78	32 - 141
13C12-123678-HxCDD	82	28 - 130
13C12-123789-HxCDD	81	28 - 130
13C12-1234678-HpCDD	82	23 - 140
13C12-OCDD	80	17 - 157
13C12-2378-TCDF	66	24 - 169
13C12-12378-PeCDF	78	24 - 185
13C12-23478-PeCDF	75	21 - 178
13C12-123478-HxCDF	71	26 - 152
13C12-123678-HxCDF	78	26 - 123
13C12-234678-HxCDF	76	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	90	28 - 143
13C12-1234789-HpCDF	76	26 - 138
13C12-OCDF	72	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-122-SA5B-SB-2.0-3.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183579
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DS122 SDG#: DX038-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-122-SA5B-SB-2.0-3.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-122-SA5B-SB-2.0-3.0

LLI Sample # SW 6183579
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:39

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DS122 SDG#: DX038-18

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11026001	02/02/2011 22:49	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11026001	01/26/2011 13:00	Deborah M Zimmerman	1
11625	28a Moisture Content by 160.3	EPA 160.3 modified	1	11019162401B	01/19/2011 19:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183580
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DEB20 SDG#: DX038-19EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.241	U	0.241	2.17	1
10915	12378-PeCDD	40321-76-4	0.271	U	0.271	10.9	1
10915	123478-HxCDD	39227-28-6	0.167	JBQ	0.145	10.9	1
10915	123678-HxCDD	57653-85-7	0.509	JBQ	0.150	10.9	1
10915	123789-HxCDD	19408-74-3	0.189	JQ	0.143	10.9	1
10915	1234678-HpCDD	35822-46-9	2.25	JB	0.287	10.9	1
10915	OCDD	3268-87-9	5.27	JB	0.306	21.7	1
10915	2378-TCDF	51207-31-9	0.174	U	0.174	2.17	1
10915	12378-PeCDF	57117-41-6	0.132	JBQ	0.0897	10.9	1
10915	23478-PeCDF	57117-31-4	0.481	JBQ	0.0832	10.9	1
10915	123478-HxCDF	70648-26-9	0.640	JBQ	0.158	10.9	1
10915	123678-HxCDF	57117-44-9	0.378	JBQ	0.145	10.9	1
10915	123789-HxCDF	72918-21-9	0.152	U	0.152	10.9	1
10915	234678-HxCDF	60851-34-5	0.725	JB	0.138	10.9	1
10915	1234678-HpCDF	67562-39-4	3.35	JB	0.147	10.9	1
10915	1234789-HpCDF	55673-89-7	0.385	JBQ	0.180	10.9	1
10915	OCDF	39001-02-0	2.41	JB	0.293	21.7	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-12378-PeCDD	75	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	73	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	71	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	77	24 - 169
13C12-12378-PeCDF	79	24 - 185
13C12-23478-PeCDF	79	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	77	26 - 123
13C12-234678-HxCDF	78	28 - 136
13C12-123789-HxCDF	78	29 - 147
13C12-1234678-HpCDF	74	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	88	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB20-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB20-SA5B-011311

LLI Sample # WW 6183580
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 13:00

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DEB20 SDG#: DX038-19EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	11025002	02/02/2011 22:52	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	11025002	01/26/2011 05:55	Ginelle L Haines	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB21-SA5B-011311 Water
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183581
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DEB21 SDG#: DX038-20EB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.235	U	0.235	2.03	1
10915	12378-PeCDD	40321-76-4	0.270	U	0.270	10.2	1
10915	123478-HxCDD	39227-28-6	0.175	U	0.175	10.2	1
10915	123678-HxCDD	57653-85-7	0.180	U	0.180	10.2	1
10915	123789-HxCDD	19408-74-3	0.360	JQ	0.177	10.2	1
10915	1234678-HpCDD	35822-46-9	1.75	JBQ	0.319	10.2	1
10915	OCDD	3268-87-9	4.78	JB	0.387	20.3	1
10915	2378-TCDF	51207-31-9	0.170	U	0.170	2.03	1
10915	12378-PeCDF	57117-41-6	0.173	JBQ	0.103	10.2	1
10915	23478-PeCDF	57117-31-4	0.660	JBQ	0.0953	10.2	1
10915	123478-HxCDF	70648-26-9	0.477	JBQ	0.149	10.2	1
10915	123678-HxCDF	57117-44-9	0.581	JBQ	0.141	10.2	1
10915	123789-HxCDF	72918-21-9	0.313	JBQ	0.150	10.2	1
10915	234678-HxCDF	60851-34-5	0.656	JBQ	0.134	10.2	1
10915	1234678-HpCDF	67562-39-4	3.69	JBQ	0.144	10.2	1
10915	1234789-HpCDF	55673-89-7	0.282	JBQ	0.160	10.2	1
10915	OCDF	39001-02-0	2.42	JBQ	0.302	20.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	65	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	64	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	64	23 - 140
13C12-OCDD	67	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	64	28 - 143
13C12-1234789-HpCDF	68	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	84	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **EB21-SA5B-011311 Water**
SSFL Area IV Collocated Soil Sampling
EB21-SA5B-011311

LLI Sample # WW 6183581
LLI Group # 1229059
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 01/13/2011 11:55

Submitted: 01/14/2011 08:45
Reported: 03/01/2011 19:49

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DEB21 SDG#: DX038-20EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	11025002	02/02/2011 23:49	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	11025002	01/26/2011 05:55	Ginelle L Haines	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229059
Reported: 03/01/11 at 07:49 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11019162401B	Sample number(s): 6183573-6183579								
28a Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11025002	Sample number(s): 6183580-6183581								
2378-TCDD	0.212 U	0.212	2.00	pg/l	100		67-158		
12378-PeCDD	0.265 J	0.231	10.0	pg/l	104		70-142		
123478-HxCDD	0.161 J	0.140	10.0	pg/l	107		70-164		
123678-HxCDD	0.155 J	0.148	10.0	pg/l	106		76-134		
123789-HxCDD	0.146 U	0.146	10.0	pg/l	106		64-162		
1234678-HpCDD	1.97 J	0.274	10.0	pg/l	111		70-140		
OCDD	4.75 J	0.252	20.0	pg/l	117		78-144		
2378-TCDF	0.291 J	0.168	2.00	pg/l	107		75-158		
12378-PeCDF	0.284 J	0.0732	10.0	pg/l	106		80-134		
23478-PeCDF	0.530 J	0.0682	10.0	pg/l	105		68-160		
123478-HxCDF	0.784 J	0.122	10.0	pg/l	111		72-134		
123678-HxCDF	0.463 J	0.112	10.0	pg/l	108		84-130		
123789-HxCDF	0.178 J	0.123	10.0	pg/l	108		78-130		
234678-HxCDF	0.865 J	0.110	10.0	pg/l	109		70-156		
1234678-HpCDF	3.23 J	0.136	10.0	pg/l	113		82-122		
1234789-HpCDF	0.279 J	0.162	10.0	pg/l	113		78-138		
OCDF	2.06 J	0.262	20.0	pg/l	118		63-170		
Batch number: 11026001	Sample number(s): 6183573-6183579								
2378-TCDD	0.0468 U	0.0468	1.00	ng/kg	91		67-158		
12378-PeCDD	0.0442 U	0.0442	5.00	ng/kg	95		70-142		
123478-HxCDD	0.0330 U	0.0330	5.00	ng/kg	90		70-164		
123678-HxCDD	0.0335 U	0.0335	5.00	ng/kg	94		76-134		
123789-HxCDD	0.0310 U	0.0310	5.00	ng/kg	88		64-162		
1234678-HpCDD	0.231 J	0.0445	5.00	ng/kg	92		70-140		
OCDD	0.604 J	0.0380	10.0	ng/kg	91		78-144		
2378-TCDF	0.0493 U	0.0493	1.00	ng/kg	99		75-158		
12378-PeCDF	0.0235 U	0.0235	5.00	ng/kg	93		80-134		
23478-PeCDF	0.0240 U	0.0240	5.00	ng/kg	94		68-160		
123478-HxCDF	0.0920 J	0.0277	5.00	ng/kg	92		72-134		
123678-HxCDF	0.0350 J	0.0216	5.00	ng/kg	91		84-130		
123789-HxCDF	0.0311 J	0.0260	5.00	ng/kg	91		78-130		
234678-HxCDF	0.0717 J	0.0249	5.00	ng/kg	92		70-156		
1234678-HpCDF	0.285 J	0.0192	5.00	ng/kg	92		82-122		
1234789-HpCDF	0.0343 J	0.0273	5.00	ng/kg	92		78-138		
OCDF	0.323 J	0.0569	10.0	ng/kg	93		63-170		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229059
Reported: 03/01/11 at 07:49 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11019162401B	Sample number(s): 6183573-6183579					BKG: P183552			
28a Moisture Content by 160.3						23.0	22.7	1	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B
Batch number: 11025002

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6183580	73	79	73	77	78	78
6183581	65	69	65	67	68	70
Blank	77	86	83	85	87	88
OPR	76	82	78	84	82	87
Limits:	25-164	21-178	26-152	26-123	28-136	29-147

	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6183580	74	71	73	88	75	73
6183581	64	68	73	84	64	64
Blank	84	86	89	98	83	82
OPR	83	87	96	93	78	77
Limits:	28-143	26-138	17-157	35-197	25-181	32-141

	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6183580	73	73	71	76	77	79
6183581	64	63	64	67	69	68
Blank	82	81	82	87	83	89
OPR	78	78	81	89	79	83
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11026001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6183573	70	82	74	80	77	83
6183574	66	78	70	76	73	77
6183575	76	85	75	86	81	88
6183576	70	84	72	78	75	84
6183577	93	105	88	97	96	104
6183578	83	91	79	87	83	88
6183579	66	75	71	78	76	78

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1229059
Reported: 03/01/11 at 07:49 PM

Surrogate Quality Control

Blank	76	76	69	85	75	83
OPR	62	71	58	69	67	71
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6183573	91	78	77	87	85	79
6183574	81	76	73	84	79	74
6183575	93	83	81	91	85	83
6183576	87	79	76	91	83	76
6183577	101	101	98	105	101	94
6183578	98	84	77	92	97	90
6183579	90	76	72	81	84	78
Blank	93	81	81	91	79	80
OPR	76	71	68	78	74	71
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6183573	80	79	85	83	71	85
6183574	74	74	79	79	68	78
6183575	81	84	88	90	76	90
6183576	77	75	81	83	70	85
6183577	95	97	103	103	93	104
6183578	93	88	90	89	87	95
6183579	82	81	82	80	66	78
Blank	81	84	91	93	71	85
OPR	71	71	77	75	64	72
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1229059 61835 5 73-81

AHO 1/14/11

CHAIN OF CUSTODY RECORD

CDM | SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
@ For hex chrome analysis, lab will measure pH and ORP

Samplers Signature:

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	PRIMARY FOR ALL LOCATIONS: *Metals EPA 6010/6020/7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7196@	Perchlorate Confirmation by EPA 6850 (10%)	SS ONLY: *Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	VOCs: VOCs/EPA 8260B	1,4-Dioxane EPA 8260SIM	TPH-GRO EPA 8015B	SECONDARY FOR ALL LOCATIONS: **pH EPA 9045C	**TPH-EPH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-073-SA5B-SB-4.0-5.0	01.13.1	1231	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																	
SL-073-SA5B-SB-4.5	01.13.1	1227	SOIL	NONE	4 ENCORES																								
SL-301-SA5B-SB-4.0-5.0	01.13.1	0945	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X				X	X												
SL-301-SA5B-SB-4.5	01.13.1	0941	SOIL	NONE	4 ENCORES																								
SL-301-SA5B-SB-7.5-8.5	01.13.1	0948	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X				X	X												
SL-074-SA5B-SB-4.0-5.0	01.13.1	1111	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																	
SL-074-SA5B-SB-4.5	01.13.1	1109	SOIL	NONE	4 ENCORES																								
SL-074-SA5B-SB-7.0-8.0	01.13.1	1116	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X				X	X												
SL-121-SA5B-SB-4.0-5.0	01.13.1	1022	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																	
SL-121-SA5B-SB-4.5	01.13.1	1018	SOIL	NONE	4 ENCORES																								
SL-121-SA5B-SB-9.0-10.0	01.13.1	1027	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X				X	X												
SL-120-SA5B-SB-3.0-4.0	01.13.1	1125	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X																	
SL-120-SA5B-SB-3.5	01.13.1	1120	SOIL	NONE	4 ENCORES																								
SL-119-SA5B-SB-3.0-4.0	01.13.1	0853	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X				X	X												
SL-119-SA5B-SB-3.5	01.13.1	0849	SOIL	NONE	4 ENCORES																								
SED-009-SW-SD-0.0-0.5	01.13.1	0945	SOIL	NONE	1 16 oz. jar & 1 6" sleeve	X	X	X	X	X	X	X		X	X	X	X												
SED-026-SW-SD-0.0-0.5	01.13.1	1115	SOIL	NONE	1 16 oz. jar & 1 6" sleeve	X	X	X	X	X	X	X		X	X														
SL-122-SA5B-SB-2.0-3.0	01.13.1	1339	SOIL	NONE	2 16 oz. jars	X	X	X	X	X	X	X	X																
SL-122-SA5B-SB-2.5	01.13.1	1334	SOIL	NONE	4 ENCORES																								
EB20-SA5B-011311	01.13.1	1300	WATER	NONE	4 1L AMBER BOTTLES			X	X	X						X	X												
EB20-SA5B-011311	01.13.1	1300	WATER	NONE	1 - 500 mL POLY		X				X	X																	
EB20-SA5B-011311	01.13.1	1300	WATER	HNO3	1 - 500 mL POLY	X																							
EB21-SA5B-011311	01.13.1	1155	WATER	NONE	4 1L AMBER BOTTLES			X	X	X																			
EB21-SA5B-011311	01.13.1	1155	WATER	NONE	1 - 500 mL POLY		X				X	X																	
EB21-SA5B-011311	01.13.1	1155	WATER	HNO3	1 - 500 mL POLY	X																							
TB-011311	01.13.1	0800	WATER	HCl	3-40 mL VOA VIALS											X	X												

Relinquished by: (Signature) — Date/Time: 1/13/2011, 17:08

Received by: (Signature) — Date/Time:

Received for Laboratory by: (Signature) — 1/14/11 845

Airbill No.[s]: 8695 1431 9917, ...9928, ...9938

Laboratory: Lancaster Laboratories, Inc.

No. of coolers = 3

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

June 20, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 05/24/2011
Group Number: 1248215
SDG: DE159
PO Number: 1203-004-008-AL
Release Number: TRACKING #12090
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-084-SA5DN-SB-4.0-5.0 Soil	6296035
SL-089-SA5DN-SB-4.0-5.0 Soil	6296036
SL-081-SA5DN-SB-4.0-5.0 Soil	6296037
SL-081-SA5DN-SB-9.0-10.0 Soil	6296038
SL-075-SA5DN-SB-4.0-5.0 Soil	6296039
SL-075-SA5DN-SB-9.0-10.0 Soil	6296040
TB-052311 Water	6296041
SL-015-SA5DN-SS-0.0-0.5 Soil	6296042
SL-016-SA5DN-SS-0.0-0.5 Soil	6296043
SL-017-SA5DN-SS-0.0-0.5 Soil	6296044
SL-019-SA5DN-SS-0.0-0.5 Soil	6296045
SL-021-SA5DN-SS-0.0-0.5 Soil	6296046
SL-022-SA5DN-SS-0.0-0.5 Soil	6296047
SL-022-SA5DN-SS-0.0-0.5MS Soil	6296048
SL-022-SA5DN-SS-0.0-0.5MSD Soil	6296049
SL-022-SA5DN-SS-0.0-0.5DUP Soil	6296050
SL-023-SA5DN-SS-0.0-0.5 Soil	6296051
SL-052-SA5DN-SS-0.0-0.5 Soil	6296052
SL-053-SA5DN-SS-0.0-0.5 Soil	6296053
DUP05-SA5DN-QC-052311 Soil	6296054
EB05-SA5DN-SS-052311 Water	6296055
SED-035-SIV-SD Sediment	6296056

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

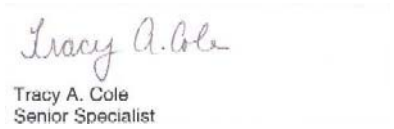
Analysis Report

ELECTRONIC COPY TO CDM Federal Services Program Attn: Todd Burgesser

1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Tracy A. Cole
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.0	J	6.9	8.3		0.93
06192	Benzene	71-43-2	0.10	U	0.10	4.1		0.93
06192	Bromobenzene	108-86-1	0.13	U	0.13	4.1		0.93
06192	Bromochloromethane	74-97-5	0.34	U	0.34	4.1		0.93
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.1		0.93
06192	Bromoform	75-25-2	0.41	U	0.41	4.1		0.93
06192	Bromomethane	74-83-9	0.26	U	0.26	4.1		0.93
06192	2-Butanone	78-93-3	1.3	U	1.3	8.3		0.93
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.1		0.93
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.1		0.93
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	4.1		0.93
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	4.1		0.93
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.1		0.93
06192	Chloroethane	75-00-3	0.13	U	0.13	4.1		0.93
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31	U	0.31	4.1		0.93
06192	Chloroform	67-66-3	0.12	U	0.12	4.1		0.93
06192	Chloromethane	74-87-3	0.34	U	0.34	4.1		0.93
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	4.1		0.93
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	4.1		0.93
06192	Chlorotrifluoroethene	79-38-9	0.52	U	0.52	5.2		0.93
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.72	U	0.72	4.1		0.93
06192	Dibromochloromethane	124-48-1	0.21	U	0.21	4.1		0.93
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.1		0.93
06192	Dibromomethane	74-95-3	0.25	U	0.25	4.1		0.93
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.1		0.93
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.1		0.93
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	4.1		0.93
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.1		0.93
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.1		0.93
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	4.1		0.93
06192	1,1-Dichloroethene	75-35-4	0.40	U	0.40	4.1		0.93
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.1		0.93
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.1		0.93
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.1		0.93
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.1		0.93
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.1		0.93
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	4.1		0.93
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	4.1		0.93
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.1		0.93
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.1		0.93
06192	Freon 113	76-13-1	0.11	U	0.11	4.1		0.93
06192	Freon 133a	75-88-7	0.52	U	0.52	5.2		0.93
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	4.1		0.93
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.3		0.93
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.1		0.93
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.1		0.93
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22	U	0.22	4.1		0.93
06192	4-Methyl-2-pentanone	108-10-1	0.40	U	0.40	8.3		0.93
06192	Methylene Chloride	75-09-2	1.2	J	0.25	4.1		0.93
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.1		0.93

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10	U	0.10	4.1		0.93
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.1		0.93
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24	U	0.24	4.1		0.93
06192	Tetrachloroethene	127-18-4	0.21	U	0.21	4.1		0.93
06192	Toluene	108-88-3	0.08	U	0.08	4.1		0.93
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	4.1		0.93
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.1		0.93
06192	1,1,1-Trichloroethane	71-55-6	0.21	U	0.21	4.1		0.93
06192	1,1,2-Trichloroethane	79-00-5	0.28	U	0.28	4.1		0.93
06192	Trichloroethene	79-01-6	0.15	U	0.15	4.1		0.93
06192	Trichlorofluoromethane	75-69-4	0.30	U	0.30	4.1		0.93
06192	1,2,3-Trichloropropane	96-18-4	0.34	U	0.34	4.1		0.93
06192	1,2,4-Trimethylbenzene	95-63-6	0.41	U	0.41	4.1		0.93
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.1		0.93
06192	Vinyl Chloride	75-01-4	0.21	U	0.21	4.1		0.93
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.1		0.93
06192	o-Xylene	95-47-6	0.18	U	0.18	4.1		0.93
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS Volatiles	**SW-846 8260B SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.5	U	5.5	16		24.85
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180		1
04688	4-Chloroaniline	106-47-8	74	U	74	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrophenol	51-28-5	370	U	370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	74	U	74	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	37	U	37	180		1
04688	4-Methylphenol	106-44-5	37	U	37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	37	U	37	180		1
04688	4-Nitroaniline	100-01-6	74	U	74	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	20		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Chrysene	218-01-9	0.36	U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5	U	6.5	20		1
10138	Fluoranthene	206-44-0	0.73	U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U	0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20		1
10138	Phenanthrene	85-01-8	0.73	U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73	U	0.73	1.8		1
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	66	U	66	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	44	U	44	130	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	88	U	88	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	88	U	88	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	44	U	44	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	44	U	44	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	44	U	44	130	10000000	1
10132	HMX	2691-41-0	110	U	110	330	10000000	1
10132	Nitrobenzene	98-95-3	44	U	44	130	10000000	1
10132	Nitroglycerin	55-63-0	880	U	880	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	88	U	88	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	88	U	88	130	10000000	1
10132	PETN	78-11-5	880	U	880	2,700	10000000	1
10132	RDX	121-82-4	55	U	55	130	10000000	1
10132	Tetryl	479-45-8	68	U	68	130	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	1,3,5-Trinitrobenzene	99-35-4	44	U	44	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	44	U	44	130	10000000	1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36	U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36	U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36	U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43	U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,100		5.35	21.3		1
07914	Boron	7440-42-8	0.947	U	0.947	5.32		1
01650	Calcium	7440-70-2	33,200		6.52	21.3		1
01654	Iron	7439-89-6	24,000		5.01	21.3		1
01656	Lithium	7439-93-2	23.5		0.23	2.1		1
01657	Magnesium	7439-95-4	4,850		2.70	10.6		1
06958	Manganese	7439-96-5	211		0.0830	0.532		1
10145	Phosphorus	7723-14-0	224		0.596	10.6		1
01662	Potassium	7440-09-7	2,100		19.1	53.2		1
01667	Sodium	7440-23-5	261		39.7	106		1
07968	Strontium	7440-24-6	44.6		0.0659	0.532		1
06969	Tin	7440-31-5	2.79	J	1.06	10.6		1
06970	Titanium	7440-32-6	1,310		0.404	1.06		1
10146	Zirconium	7440-67-7	4.74	J	0.893	5.32		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.259		0.0664	0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.95		0.0885	0.442		2
06126	Barium	7440-39-3	167		0.119	0.442		2
06127	Beryllium	7440-41-7	0.867		0.0177	0.111		2
06128	Cadmium	7440-43-9	0.153		0.0442	0.111		2
06131	Chromium	7440-47-3	20.7		0.133	0.442		2
06132	Cobalt	7440-48-4	4.97		0.0221	0.111		2
06133	Copper	7440-50-8	14.0		0.0730	0.442		2
06135	Lead	7439-92-1	10.6		0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.605		0.0553	0.111		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06139	Nickel	7440-02-0	20.0	0.111	0.442		2
06141	Selenium	7782-49-2	0.0788 J	0.0442	0.442		2
06142	Silver	7440-22-4	0.0345 J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.405	0.0332	0.111		2
06148	Vanadium	7440-62-2	77.3	0.0243	0.111		2
06149	Zinc	7440-66-6	70.2	0.619	3.32		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0663 J	0.0031	0.108		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	5.9	0.88	1.1		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10 U	10	33.2		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.85 J	0.22	1.1		1
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.34	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	9.6	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-084-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 16:33	Chelsea B Eastep	0.93
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 19:57	Sara E Johnson	24.85

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 15:51	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 15:48	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 07:23	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 17:33	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 20:46	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:00	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:37	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:37	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:44	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:55	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 18:48	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 15:13	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 14:50	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.9	J	6.3	7.5		0.86
06192	Benzene	71-43-2	0.09	U	0.09	3.8		0.86
06192	Bromobenzene	108-86-1	0.12	U	0.12	3.8		0.86
06192	Bromochloromethane	74-97-5	0.31	U	0.31	3.8		0.86
06192	Bromodichloromethane	75-27-4	0.07	U	0.07	3.8		0.86
06192	Bromoform	75-25-2	0.38	U	0.38	3.8		0.86
06192	Bromomethane	74-83-9	0.24	U	0.24	3.8		0.86
06192	2-Butanone	78-93-3	1.1	U	1.1	7.5		0.86
06192	n-Butylbenzene	104-51-8	0.11	U	0.11	3.8		0.86
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	3.8		0.86
06192	tert-Butylbenzene	98-06-6	0.15	U	0.15	3.8		0.86
06192	Carbon Tetrachloride	56-23-5	0.13	U	0.13	3.8		0.86
06192	Chlorobenzene	108-90-7	0.10	U	0.10	3.8		0.86
06192	Chloroethane	75-00-3	0.12	U	0.12	3.8		0.86
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.28	U	0.28	3.8		0.86
06192	Chloroform	67-66-3	0.11	U	0.11	3.8		0.86
06192	Chloromethane	74-87-3	0.31	U	0.31	3.8		0.86
06192	2-Chlorotoluene	95-49-8	0.13	U	0.13	3.8		0.86
06192	4-Chlorotoluene	106-43-4	0.13	U	0.13	3.8		0.86
06192	Chlorotrifluoroethene	79-38-9	0.47	U	0.47	4.7		0.86
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.66	U	0.66	3.8		0.86
06192	Dibromochloromethane	124-48-1	0.19	U	0.19	3.8		0.86
06192	1,2-Dibromoethane	106-93-4	0.16	U	0.16	3.8		0.86
06192	Dibromomethane	74-95-3	0.23	U	0.23	3.8		0.86
06192	1,2-Dichlorobenzene	95-50-1	0.08	U	0.08	3.8		0.86
06192	1,3-Dichlorobenzene	541-73-1	0.11	U	0.11	3.8		0.86
06192	1,4-Dichlorobenzene	106-46-7	0.15	U	0.15	3.8		0.86
06192	Dichlorodifluoromethane	75-71-8	0.11	U	0.11	3.8		0.86
06192	1,1-Dichloroethane	75-34-3	0.09	U	0.09	3.8		0.86
06192	1,2-Dichloroethane	107-06-2	0.14	U	0.14	3.8		0.86
06192	1,1-Dichloroethene	75-35-4	0.37	U	0.37	3.8		0.86
06192	cis-1,2-Dichloroethene	156-59-2	0.18	U	0.18	3.8		0.86
06192	trans-1,2-Dichloroethene	156-60-5	0.11	U	0.11	3.8		0.86
06192	1,2-Dichloropropane	78-87-5	0.16	U	0.16	3.8		0.86
06192	1,3-Dichloropropane	142-28-9	0.07	U	0.07	3.8		0.86
06192	2,2-Dichloropropane	594-20-7	0.16	U	0.16	3.8		0.86
06192	1,1-Dichloropropene	563-58-6	0.12	U	0.12	3.8		0.86
06192	cis-1,3-Dichloropropene	10061-01-5	0.15	U	0.15	3.8		0.86
06192	trans-1,3-Dichloropropene	10061-02-6	0.16	U	0.16	3.8		0.86
06192	Ethylbenzene	100-41-4	0.06	U	0.06	3.8		0.86
06192	Freon 113	76-13-1	0.10	U	0.10	3.8		0.86
06192	Freon 133a	75-88-7	0.47	U	0.47	4.7		0.86
06192	Hexachlorobutadiene	87-68-3	0.13	U	0.13	3.8		0.86
06192	2-Hexanone	591-78-6	1.5	U	1.5	7.5		0.86
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	3.8		0.86
06192	p-Isopropyltoluene	99-87-6	0.10	U	0.10	3.8		0.86
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.20	U	0.20	3.8		0.86
06192	4-Methyl-2-pentanone	108-10-1	0.37	U	0.37	7.5		0.86
06192	Methylene Chloride	75-09-2	0.82	J	0.23	3.8		0.86
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	3.8		0.86

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.09	U	0.09	3.8		0.86
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.10	U	0.10	3.8		0.86
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22	U	0.22	3.8		0.86
06192	Tetrachloroethene	127-18-4	0.19	U	0.19	3.8		0.86
06192	Toluene	108-88-3	0.07	U	0.07	3.8		0.86
06192	1,2,3-Trichlorobenzene	87-61-6	0.13	U	0.13	3.8		0.86
06192	1,2,4-Trichlorobenzene	120-82-1	0.17	U	0.17	3.8		0.86
06192	1,1,1-Trichloroethane	71-55-6	0.19	U	0.19	3.8		0.86
06192	1,1,2-Trichloroethane	79-00-5	0.25	U	0.25	3.8		0.86
06192	Trichloroethene	79-01-6	0.14	U	0.14	3.8		0.86
06192	Trichlorofluoromethane	75-69-4	0.27	U	0.27	3.8		0.86
06192	1,2,3-Trichloropropane	96-18-4	0.31	U	0.31	3.8		0.86
06192	1,2,4-Trimethylbenzene	95-63-6	0.38	U	0.38	3.8		0.86
06192	1,3,5-Trimethylbenzene	108-67-8	0.09	U	0.09	3.8		0.86
06192	Vinyl Chloride	75-01-4	0.19	U	0.19	3.8		0.86
06192	m+p-Xylene	179601-23-1	0.16	U	0.16	3.8		0.86
06192	o-Xylene	95-47-6	0.16	U	0.16	3.8		0.86
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.6	U	4.6	14		21.11
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	18.3	U	18.3	36.7		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1
04688	2,4-Dinitrophenol	51-28-5	370	U	370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	37	U	37	180		1
04688	4-Methylphenol	106-44-5	37	U	37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	37	U	37	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.72	U	0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.72	U	0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.72	U	0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U	0.72	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Benzo(k)fluoranthene	207-08-9	0.72	U	0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	20		1
10138	Chrysene	218-01-9	0.36	U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5	U	6.5	20		1
10138	Fluoranthene	206-44-0	0.72	U	0.72	1.8		1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	U	0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.72	U	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72	U	0.72	1.8		1
10138	Naphthalene	91-20-3	0.72	U	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20		1
10138	Phenanthrene	85-01-8	0.72	U	0.72	1.8		1
10138	Pyrene	129-00-0	0.72	U	0.72	1.8		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1		22.2
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	66	U	66	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	44	U	44	130	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	88	U	88	260	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	88	U	88	260	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	44	U	44	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	44	U	44	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	44	U	44	130	10000000	1
10132	HMX	2691-41-0	110	U	110	330	10000000	1
10132	Nitrobenzene	98-95-3	44	U	44	130	10000000	1
10132	Nitroglycerin	55-63-0	880	U	880	2,600	10000000	1
10132	2-Nitrotoluene	88-72-2	88	U	88	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Nitrotoluene	99-99-0	88	U	88	130	10000000	1
10132	PETN	78-11-5	880	U	880	2,600	10000000	1
10132	RDX	121-82-4	55	U	55	130	10000000	1
10132	Tetryl	479-45-8	67	U	67	130	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	44	U	44	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	44	U	44	130	10000000	1
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	25a Formaldehyde 8315A	50-00-0	650	U	650	1,600		1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.3	U	2.3	5.5		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36	U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36	U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36	U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43	U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C15-C20)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C21-C30)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C30 - C40)	n.a.	0.44	J	0.44	1.3		1
10199	EFH (C8-C11)	n.a.	0.44	U	0.44	1.3		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	550		1
10501	Isopropanol	67-63-0	110	U	110	550		1
10501	Methanol	67-56-1	110	U	110	550		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.5	U	5.5	11		1
08283	Ethylene glycol	107-21-1	5.5	U	5.5	11		1
08283	Propylene glycol	57-55-6	5.5	U	5.5	11		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	3.9		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	3.9		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	3.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,600		5.48	21.8		1
07914	Boron	7440-42-8	0.969	U	0.969	5.45		1
01650	Calcium	7440-70-2	4,530		6.68	21.8		1
01654	Iron	7439-89-6	27,300		5.13	21.8		1
01656	Lithium	7439-93-2	27.0		0.24	2.2		1
01657	Magnesium	7439-95-4	5,550		2.77	10.9		1
06958	Manganese	7439-96-5	430		0.0850	0.545		1
10145	Phosphorus	7723-14-0	253		0.610	10.9		1
01662	Potassium	7440-09-7	2,650		19.6	54.5		1
01667	Sodium	7440-23-5	191		40.6	109		1
07968	Strontium	7440-24-6	28.8		0.0675	0.545		1
06969	Tin	7440-31-5	3.00	J	1.09	10.9		1
06970	Titanium	7440-32-6	1,390		0.414	1.09		1
10146	Zirconium	7440-67-7	5.65		0.915	5.45		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.370		0.0647	0.216		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	12.3		0.0863	0.431		2
06126	Barium	7440-39-3	176		0.116	0.431		2
06127	Beryllium	7440-41-7	1.14		0.0173	0.108		2
06128	Cadmium	7440-43-9	0.330		0.0431	0.108		2
06131	Chromium	7440-47-3	22.7		0.129	0.431		2
06132	Cobalt	7440-48-4	9.24		0.0216	0.108		2
06133	Copper	7440-50-8	20.1		0.0712	0.431		2
06135	Lead	7439-92-1	15.4		0.0112	0.216		2
06138	Molybdenum	7439-98-7	0.540		0.0539	0.108		2
06139	Nickel	7440-02-0	29.9		0.108	0.431		2
06141	Selenium	7782-49-2	0.0574	J	0.0431	0.431		2
06142	Silver	7440-22-4	0.0750	J	0.0129	0.108		2
06145	Thallium	7440-28-0	0.440		0.0324	0.108		2
06148	Vanadium	7440-62-2	90.3		0.0237	0.108		2
06149	Zinc	7440-66-6	79.6		0.604	3.24		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0030	U	0.0030	0.103		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg		mg/kg	mg/kg	mg/kg	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.1		0.88	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.1	J	0.88	1.7		1
	EPA 314.0		ug/kg		ug/kg	ug/kg	ug/kg	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9	U	9.9	33.0		1
	SW-846 7199		mg/kg		mg/kg	mg/kg	mg/kg	
05892	3a Cr VI by EPA 7199	18540-29-9	0.41	J	0.22	1.1		1
	SW-846 9012B		mg/kg		mg/kg	mg/kg	mg/kg	
05895	17a Cyanide by 9012B	57-12-5	0.19	U	0.19	0.53		1
	SW-846 9045C modified		Std. Units		Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	7.55		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%		%	%	%	
11624	Moisture Content by 160.3	n.a.	9.1		0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-089-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 16:55	Chelsea B Eastep	0.86
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 20:17	Sara E Johnson	21.11
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 15:56	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 15:54	Lois E Hiltz	n.a.
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 20:05	Matthew S Woods	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 07:49	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 18:04	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11151B34A	05/31/2011 17:01	Elizabeth J Marin	22.2
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 15:53	Lois E Hiltz	n.a.
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 21:28	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 19:39	James H Place	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/06/2011 21:40	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:18	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111570011A	06/07/2011 22:48	Heather E Williams	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:13	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 20:24	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 07:22	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	111570011A	06/06/2011 18:30	Sally L Appleyard	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:24	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:24	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:40	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 19:30	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 19:30	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 16:19	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 14:56	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:33	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.7		7.0	8.3		0.94
06192	Benzene	71-43-2	0.10	U	0.10	4.2		0.94
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.2		0.94
06192	Bromochloromethane	74-97-5	0.34	U	0.34	4.2		0.94
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.2		0.94
06192	Bromoform	75-25-2	0.42	U	0.42	4.2		0.94
06192	Bromomethane	74-83-9	0.26	U	0.26	4.2		0.94
06192	2-Butanone	78-93-3	1.3	U	1.3	8.3		0.94
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.2		0.94
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.2		0.94
06192	tert-Butylbenzene	98-06-6	0.17	U	0.17	4.2		0.94
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.2		0.94
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.2		0.94
06192	Chloroethane	75-00-3	0.14	U	0.14	4.2		0.94
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31	U	0.31	4.2		0.94
06192	Chloroform	67-66-3	0.12	U	0.12	4.2		0.94
06192	Chloromethane	74-87-3	0.34	U	0.34	4.2		0.94
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.2		0.94
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.2		0.94
06192	Chlorotrifluoroethene	79-38-9	0.52	U	0.52	5.2		0.94
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.73	U	0.73	4.2		0.94
06192	Dibromochloromethane	124-48-1	0.21	U	0.21	4.2		0.94
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.2		0.94
06192	Dibromomethane	74-95-3	0.25	U	0.25	4.2		0.94
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.2		0.94
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.2		0.94
06192	1,4-Dichlorobenzene	106-46-7	0.17	U	0.17	4.2		0.94
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.2		0.94
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.2		0.94
06192	1,2-Dichloroethane	107-06-2	0.16	U	0.16	4.2		0.94
06192	1,1-Dichloroethene	75-35-4	0.41	U	0.41	4.2		0.94
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.2		0.94
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.2		0.94
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.2		0.94
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.2		0.94
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.2		0.94
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.2		0.94
06192	cis-1,3-Dichloropropene	10061-01-5	0.17	U	0.17	4.2		0.94
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.2		0.94
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.2		0.94
06192	Freon 113	76-13-1	0.11	U	0.11	4.2		0.94
06192	Freon 133a	75-88-7	0.52	U	0.52	5.2		0.94
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.2		0.94
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.3		0.94
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.2		0.94
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.2		0.94
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22	U	0.22	4.2		0.94
06192	4-Methyl-2-pentanone	108-10-1	0.41	U	0.41	8.3		0.94
06192	Methylene Chloride	75-09-2	0.79	J	0.25	4.2		0.94
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.2		0.94

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.10	U	0.10	4.2		0.94
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.2		0.94
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24	U	0.24	4.2		0.94
06192	Tetrachloroethene	127-18-4	0.21	U	0.21	4.2		0.94
06192	Toluene	108-88-3	0.08	U	0.08	4.2		0.94
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.2		0.94
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.2		0.94
06192	1,1,1-Trichloroethane	71-55-6	0.21	U	0.21	4.2		0.94
06192	1,1,2-Trichloroethane	79-00-5	0.28	U	0.28	4.2		0.94
06192	Trichloroethene	79-01-6	0.16	U	0.16	4.2		0.94
06192	Trichlorofluoromethane	75-69-4	0.30	U	0.30	4.2		0.94
06192	1,2,3-Trichloropropane	96-18-4	0.34	U	0.34	4.2		0.94
06192	1,2,4-Trimethylbenzene	95-63-6	0.42	U	0.42	4.2		0.94
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.2		0.94
06192	Vinyl Chloride	75-01-4	0.21	U	0.21	4.2		0.94
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.2		0.94
06192	o-Xylene	95-47-6	0.18	U	0.18	4.2		0.94
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.3	U	5.3	16		23.95
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrophenol	51-28-5	370	U	370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	37	U	37	180		1
04688	4-Methylphenol	106-44-5	37	U	37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	37	U	37	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.72	U	0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.72	U	0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.72	U	0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U	0.72	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.72	U	0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	20		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Chrysene	218-01-9	0.36	U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5	U	6.5	20		1
10138	Fluoranthene	206-44-0	0.72	U	0.72	1.8		1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	U	0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.72	U	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72	U	0.72	1.8		1
10138	Naphthalene	91-20-3	0.72	U	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20		1
10138	Phenanthrene	85-01-8	0.72	U	0.72	1.8		1
10138	Pyrene	129-00-0	0.72	U	0.72	1.8		1
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	66	U	66	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	44	U	44	130	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	88	U	88	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	88	U	88	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	44	U	44	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	44	U	44	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	44	U	44	130	10000000	1
10132	HMX	2691-41-0	110	U	110	330	10000000	1
10132	Nitrobenzene	98-95-3	44	U	44	130	10000000	1
10132	Nitroglycerin	55-63-0	880	U	880	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	88	U	88	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	88	U	88	130	10000000	1
10132	PETN	78-11-5	880	U	880	2,700	10000000	1
10132	RDX	121-82-4	55	U	55	130	10000000	1
10132	Tetryl	479-45-8	68	U	68	130	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	1,3,5-Trinitrobenzene	99-35-4	44	U	44	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	44	U	44	130	10000000	1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36	U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36	U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36	U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43	U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,900		5.56	22.1		1
07914	Boron	7440-42-8	1.00	J	0.983	5.52		1
01650	Calcium	7440-70-2	7,380		6.77	22.1		1
01654	Iron	7439-89-6	29,500		10.4	44.2		2
01656	Lithium	7439-93-2	28.1		0.24	2.2		1
01657	Magnesium	7439-95-4	6,630		2.81	11.0		1
06958	Manganese	7439-96-5	407		0.0862	0.552		1
10145	Phosphorus	7723-14-0	313		0.619	11.0		1
01662	Potassium	7440-09-7	3,490		19.9	55.2		1
01667	Sodium	7440-23-5	575		41.2	110		1
07968	Strontium	7440-24-6	39.1		0.0685	0.552		1
06969	Tin	7440-31-5	2.78	J	1.10	11.0		1
06970	Titanium	7440-32-6	1,710		0.420	1.10		1
10146	Zirconium	7440-67-7	6.40		0.928	5.52		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.331		0.0656	0.219		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.31		0.0875	0.438		2
06126	Barium	7440-39-3	217		0.295	1.09		5
06127	Beryllium	7440-41-7	1.04		0.0175	0.109		2
06128	Cadmium	7440-43-9	0.448		0.0438	0.109		2
06131	Chromium	7440-47-3	28.3		0.131	0.438		2
06132	Cobalt	7440-48-4	14.7		0.0219	0.109		2
06133	Copper	7440-50-8	18.2		0.0722	0.438		2
06135	Lead	7439-92-1	14.7		0.0114	0.219		2
06138	Molybdenum	7439-98-7	0.579		0.0547	0.109		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06139	Nickel	7440-02-0	29.5	0.109	0.438		2
06141	Selenium	7782-49-2	0.0438 U	0.0438	0.438		2
06142	Silver	7440-22-4	0.0729 J	0.0131	0.109		2
06145	Thallium	7440-28-0	0.478	0.0328	0.109		2
06148	Vanadium	7440-62-2	93.1	0.0241	0.109		2
06149	Zinc	7440-66-6	86.3	0.613	3.28		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0030 U	0.0030	0.106		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	20.8	0.88	1.1		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9 U	9.9	33.1		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	1.4	0.22	1.1		1
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.13	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	9.5	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-081-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 17:17	Chelsea B Eastep	0.94
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 20:36	Sara E Johnson	23.95

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:03	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 16:00	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 08:15	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 18:36	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 22:11	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:37	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:55	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:44	David K Beck	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:42	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:42	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:47	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:47	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:56	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 19:45	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 16:41	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 15:13	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	540		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	540		1
04688	Benzyl alcohol	100-51-6	180	U	180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540		1
04688	2,4-Dinitrophenol	51-28-5	360	U	360	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	540		1
04688	Phenol	108-95-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	1.1	J	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U	6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U	6.6	20		1
10138	Chrysene	218-01-9	0.55	J	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U	6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U	6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.6	U	6.6	20		1
10138	Fluoranthene	206-44-0	0.73	U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U	0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6	U	6.6	20		1
10138	Phenanthrene	85-01-8	0.73	U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73	U	0.73	1.8		1
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	64	U	64	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	43	U	43	130	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	86	U	86	260	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	86	U	86	260	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	1,3-Dinitrobenzene	99-65-0	43	U	43	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	43	U	43	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	43	U	43	130	10000000	1
10132	HMX	2691-41-0	110	U	110	320	10000000	1
10132	Nitrobenzene	98-95-3	43	U	43	130	10000000	1
10132	Nitroglycerin	55-63-0	860	U	860	2,600	10000000	1
10132	2-Nitrotoluene	88-72-2	86	U	86	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	86	U	86	130	10000000	1
10132	PETN	78-11-5	860	U	860	2,600	10000000	1
10132	RDX	121-82-4	54	U	54	130	10000000	1
10132	Tetryl	479-45-8	66	U	66	130	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	43	U	43	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	43	U	43	130	10000000	1
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36	U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36	U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36	U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43	U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
Metals	**SW-846 6010B**		mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	19,100		5.29	21.0		1
07914	Boron	7440-42-8	0.935	U	0.935	5.25		1
01650	Calcium	7440-70-2	7,150		6.44	21.0		1
01654	Iron	7439-89-6	21,500		4.95	21.0		1
01656	Lithium	7439-93-2	25.8		0.23	2.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,490		2.67	10.5		1
06958	Manganese	7439-96-5	284		0.0820	0.525		1
10145	Phosphorus	7723-14-0	291		0.588	10.5		1
01662	Potassium	7440-09-7	2,320		18.9	52.5		1
01667	Sodium	7440-23-5	341		39.2	105		1
07968	Strontium	7440-24-6	23.0		0.0652	0.525		1
06969	Tin	7440-31-5	2.66	J	1.05	10.5		1
06970	Titanium	7440-32-6	1,230		0.399	1.05		1
10146	Zirconium	7440-67-7	3.95	J	0.883	5.25		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.179	J	0.0643	0.214		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.69		0.0857	0.429		2
06126	Barium	7440-39-3	113		0.116	0.429		2
06127	Beryllium	7440-41-7	0.735		0.0171	0.107		2
06128	Cadmium	7440-43-9	0.162		0.0429	0.107		2
06131	Chromium	7440-47-3	18.7		0.129	0.429		2
06132	Cobalt	7440-48-4	6.21		0.0214	0.107		2
06133	Copper	7440-50-8	10.8		0.0707	0.429		2
06135	Lead	7439-92-1	7.15		0.0111	0.214		2
06138	Molybdenum	7439-98-7	0.418		0.0536	0.107		2
06139	Nickel	7440-02-0	17.7		0.107	0.429		2
06141	Selenium	7782-49-2	0.0429	U	0.0429	0.429		2
06142	Silver	7440-22-4	0.0560	J	0.0129	0.107		2
06145	Thallium	7440-28-0	0.337		0.0321	0.107		2
06148	Vanadium	7440-62-2	55.1		0.0236	0.107		2
06149	Zinc	7440-66-6	63.5		0.600	3.21		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0130	J	0.0031	0.109		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.9		0.87	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.8		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.60		0.0100	0.0100		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	8.5	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 08:42	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 19:06	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 22:53	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:55	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:46	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:46	David K Beck	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0819 SDG#: DE159-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:58	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 19:59	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 17:25	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 15:19	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.5		6.9	8.3		0.9
06192	Benzene	71-43-2	0.10	U	0.10	4.1		0.9
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.1		0.9
06192	Bromochloromethane	74-97-5	0.34	U	0.34	4.1		0.9
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.1		0.9
06192	Bromoform	75-25-2	0.41	U	0.41	4.1		0.9
06192	Bromomethane	74-83-9	0.26	U	0.26	4.1		0.9
06192	2-Butanone	78-93-3	1.3	U	1.3	8.3		0.9
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.1		0.9
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.1		0.9
06192	tert-Butylbenzene	98-06-6	0.17	U	0.17	4.1		0.9
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.1		0.9
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.1		0.9
06192	Chloroethane	75-00-3	0.14	U	0.14	4.1		0.9
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31	U	0.31	4.1		0.9
06192	Chloroform	67-66-3	0.12	U	0.12	4.1		0.9
06192	Chloromethane	74-87-3	0.34	U	0.34	4.1		0.9
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.1		0.9
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.1		0.9
06192	Chlorotrifluoroethene	79-38-9	0.52	U	0.52	5.2		0.9
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.73	U	0.73	4.1		0.9
06192	Dibromochloromethane	124-48-1	0.21	U	0.21	4.1		0.9
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.1		0.9
06192	Dibromomethane	74-95-3	0.25	U	0.25	4.1		0.9
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.1		0.9
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.1		0.9
06192	1,4-Dichlorobenzene	106-46-7	0.17	U	0.17	4.1		0.9
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.1		0.9
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.1		0.9
06192	1,2-Dichloroethane	107-06-2	0.16	U	0.16	4.1		0.9
06192	1,1-Dichloroethene	75-35-4	0.40	U	0.40	4.1		0.9
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.1		0.9
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.1		0.9
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.1		0.9
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.1		0.9
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.1		0.9
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.1		0.9
06192	cis-1,3-Dichloropropene	10061-01-5	0.17	U	0.17	4.1		0.9
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.1		0.9
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.1		0.9
06192	Freon 113	76-13-1	0.11	U	0.11	4.1		0.9
06192	Freon 133a	75-88-7	0.52	U	0.52	5.2		0.9
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.1		0.9
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.3		0.9
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.1		0.9
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.1		0.9
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22	U	0.22	4.1		0.9
06192	4-Methyl-2-pentanone	108-10-1	0.40	U	0.40	8.3		0.9
06192	Methylene Chloride	75-09-2	1.1	J	0.25	4.1		0.9
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.1		0.9

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.10	U	0.10	4.1		0.9
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.1		0.9
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24	U	0.24	4.1		0.9
06192	Tetrachloroethene	127-18-4	0.21	U	0.21	4.1		0.9
06192	Toluene	108-88-3	0.08	U	0.08	4.1		0.9
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.1		0.9
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.1		0.9
06192	1,1,1-Trichloroethane	71-55-6	0.21	U	0.21	4.1		0.9
06192	1,1,2-Trichloroethane	79-00-5	0.28	U	0.28	4.1		0.9
06192	Trichloroethene	79-01-6	0.16	U	0.16	4.1		0.9
06192	Trichlorofluoromethane	75-69-4	0.30	U	0.30	4.1		0.9
06192	1,2,3-Trichloropropane	96-18-4	0.34	U	0.34	4.1		0.9
06192	1,2,4-Trimethylbenzene	95-63-6	0.41	U	0.41	4.1		0.9
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.1		0.9
06192	Vinyl Chloride	75-01-4	0.21	U	0.21	4.1		0.9
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.1		0.9
06192	o-Xylene	95-47-6	0.18	U	0.18	4.1		0.9
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.2	U	5.2	15		22.36
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	76	U	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	76	U	76	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.76	U	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Chrysene	218-01-9	0.38	U	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.9	U	6.9	21		1
10138	Fluoranthene	206-44-0	0.76	U	0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76	U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21		1
10138	Phenanthrene	85-01-8	0.76	U	0.76	1.9		1
10138	Pyrene	129-00-0	0.76	U	0.76	1.9		1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	3.9	J	2.4	5.8		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	2.0		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0		1
10225	PCB-1260	11096-82-5	0.45	U	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,900		5.58	22.2		1
07914	Boron	7440-42-8	0.988	U	0.988	5.55		1
01650	Calcium	7440-70-2	10,300		6.81	22.2		1
01654	Iron	7439-89-6	31,600		10.5	44.4		2
01656	Lithium	7439-93-2	35.2		0.24	2.2		1
01657	Magnesium	7439-95-4	6,880		2.82	11.1		1
06958	Manganese	7439-96-5	178		0.0866	0.555		1
10145	Phosphorus	7723-14-0	226		0.622	11.1		1
01662	Potassium	7440-09-7	3,230		20.0	55.5		1
01667	Sodium	7440-23-5	714		41.4	111		1
07968	Strontium	7440-24-6	57.5		0.0688	0.555		1
06969	Tin	7440-31-5	3.00	J	1.11	11.1		1
06970	Titanium	7440-32-6	1,290		0.422	1.11		1
10146	Zirconium	7440-67-7	4.75	J	0.933	5.55		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.204 J	0.0679	0.226		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.08	0.0906	0.453		2
06126	Barium	7440-39-3	170	0.122	0.453		2
06127	Beryllium	7440-41-7	1.00	0.0181	0.113		2
06128	Cadmium	7440-43-9	0.490	0.0453	0.113		2
06131	Chromium	7440-47-3	26.8	0.136	0.453		2
06132	Cobalt	7440-48-4	8.52	0.0226	0.113		2
06133	Copper	7440-50-8	16.8	0.0747	0.453		2
06135	Lead	7439-92-1	13.3	0.0118	0.226		2
06138	Molybdenum	7439-98-7	0.224	0.0566	0.113		2
06139	Nickel	7440-02-0	28.7	0.113	0.453		2
06141	Selenium	7782-49-2	0.0453 U	0.0453	0.453		2
06142	Silver	7440-22-4	0.0595 J	0.0136	0.113		2
06145	Thallium	7440-28-0	0.477	0.0340	0.113		2
06148	Vanadium	7440-62-2	77.2	0.0249	0.113		2
06149	Zinc	7440-66-6	76.6	0.634	3.40		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.111		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	13.3	0.92	1.2		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.6		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.32 J	0.23	1.2		1
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.54	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	13.4	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-075-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 17:40	Chelsea B Eastep	0.9
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 20:56	Sara E Johnson	22.36
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:09	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 16:06	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 09:08	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 19:38	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 21:59	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 05:13	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:59	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:48	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:48	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:59	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 20:13	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 17:47	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 15:36	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	76	U	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	24	J	19	380		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	76	U	76	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.8	U	3.8	9.4		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.4		5
10138	Anthracene	120-12-7	1.9	U	1.9	9.4		5
10138	Benzo(a)anthracene	56-55-3	3.8	U	3.8	9.4		5
10138	Benzo(a)pyrene	50-32-8	3.8	U	3.8	9.4		5
10138	Benzo(b)fluoranthene	205-99-2	4.2	J	3.8	9.4		5
10138	Benzo(g,h,i)perylene	191-24-2	3.8	U	3.8	9.4		5
10138	Benzo(k)fluoranthene	207-08-9	3.8	U	3.8	9.4		5
10138	Chrysene	218-01-9	3.4	J	1.9	9.4		5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U	3.8	9.4		5
10138	Fluoranthene	206-44-0	5.0	J	3.8	9.4		5
10138	Fluorene	86-73-7	3.8	U	3.8	9.4		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U	3.8	9.4		5
10138	1-Methylnaphthalene	90-12-0	3.8	U	3.8	9.4		5
10138	2-Methylnaphthalene	91-57-6	3.8	U	3.8	9.4		5
10138	Naphthalene	91-20-3	7.6	J	3.8	9.4		5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U	3.8	9.4		5
10138	Phenanthrene	85-01-8	8.6	J	3.8	9.4		5
10138	Pyrene	129-00-0	3.8	U	3.8	9.4		5
	Reporting limits were raised due to interference from the sample matrix.							
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.4	U	2.4	5.8		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1232	11141-16-5	0.38	U	0.38	1.9		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9		1
10225	PCB-1260	11096-82-5	0.45	U	0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,500		5.67	22.6		1
07914	Boron	7440-42-8	1.00	U	1.00	5.64		1
01650	Calcium	7440-70-2	42,600		6.92	22.6		1
01654	Iron	7439-89-6	19,700		5.31	22.6		1
01656	Lithium	7439-93-2	22.4		0.25	2.3		1
01657	Magnesium	7439-95-4	4,760		2.87	11.3		1
06958	Manganese	7439-96-5	301		0.0880	0.564		1
10145	Phosphorus	7723-14-0	387		0.632	11.3		1
01662	Potassium	7440-09-7	2,500		20.3	56.4		1
01667	Sodium	7440-23-5	393		42.1	113		1
07968	Strontium	7440-24-6	78.8		0.0699	0.564		1
06969	Tin	7440-31-5	2.78	J	1.13	11.3		1
06970	Titanium	7440-32-6	1,230		0.429	1.13		1
10146	Zirconium	7440-67-7	4.70	J	0.948	5.64		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.194	J	0.0664	0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.16		0.0885	0.443		2
06126	Barium	7440-39-3	125		0.120	0.443		2
06127	Beryllium	7440-41-7	0.645		0.0177	0.111		2
06128	Cadmium	7440-43-9	0.484		0.0443	0.111		2
06131	Chromium	7440-47-3	20.7		0.133	0.443		2
06132	Cobalt	7440-48-4	8.19		0.0221	0.111		2
06133	Copper	7440-50-8	13.2		0.0730	0.443		2
06135	Lead	7439-92-1	8.38		0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.782		0.0553	0.111		2
06139	Nickel	7440-02-0	24.4		0.111	0.443		2
06141	Selenium	7782-49-2	0.0459	J	0.0443	0.443		2
06142	Silver	7440-22-4	0.0669	J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.379		0.0332	0.111		2
06148	Vanadium	7440-62-2	59.4		0.0243	0.111		2
06149	Zinc	7440-66-6	62.8		0.620	3.32		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032	U	0.0032	0.112		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	6.3		0.92	1.2		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4	U	10.4	34.5		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.36	J	0.23	1.2		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.91		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	13.1		0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011	09:35	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011	09:52	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011	09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011	09:15	Kerrie A Freeburn	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011	22:05	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011	05:32	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011	15:00	Sally L Appleyard	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011	09:15	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011	20:40	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011	20:40	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011	20:40	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011	20:40	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0759 SDG#: DE159-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:49	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:49	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:56	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:00	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 20:56	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 18:09	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 15:47	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: TB-052311 Water
SSFL Area IV Collocated Soil Sampling
TB-052311

LLI Sample # WW 6296041
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

TB523 SDG#: DE159-07TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	6	U	6	20		1
10904	Benzene	71-43-2	0.5	U	0.5	5		1
10904	Bromobenzene	108-86-1	1	U	1	5		1
10904	Bromochloromethane	74-97-5	1	U	1	5		1
10904	Bromodichloromethane	75-27-4	1	U	1	5		1
10904	Bromoform	75-25-2	1	U	1	5		1
10904	Bromomethane	74-83-9	1	U	1	5		1
10904	2-Butanone	78-93-3	3	U	3	10		1
10904	n-Butylbenzene	104-51-8	1	U	1	5		1
10904	sec-Butylbenzene	135-98-8	1	U	1	5		1
10904	tert-Butylbenzene	98-06-6	1	U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1	U	1	5		1
10904	Chlorobenzene	108-90-7	0.8	U	0.8	5		1
10904	Chloroethane	75-00-3	1	U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2	U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.							
10904	Chloroform	67-66-3	0.8	U	0.8	5		1
10904	Chloromethane	74-87-3	1	U	1	5		1
10904	2-Chlorotoluene	95-49-8	1	U	1	5		1
10904	4-Chlorotoluene	106-43-4	1	U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2	U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2	U	2	5		1
10904	Dibromochloromethane	124-48-1	1	U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1	U	1	5		1
10904	Dibromomethane	74-95-3	1	U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2	U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1	U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1	U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8	U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8	U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8	U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1	U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1	U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1	U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1	U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1	U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1	U	1	5		1
10904	Ethylbenzene	100-41-4	0.8	U	0.8	5		1
10904	Freon 113	76-13-1	2	U	2	10		1
10904	Freon 133a	75-88-7	2	U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2	U	2	5		1
10904	2-Hexanone	591-78-6	3	U	3	10		1
10904	Isopropylbenzene	98-82-8	1	U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1	U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5	U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3	U	3	10		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: TB-052311 Water
SSFL Area IV Collocated Soil Sampling
TB-052311

LLI Sample # WW 6296041
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

TB523 SDG#: DE159-07TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	ug/l	
10904	Methylene Chloride	75-09-2	2	U	2	5		1
10904	n-Propylbenzene	103-65-1	1	U	1	5		1
10904	Styrene	100-42-5	1	U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8	U	0.8	5		1
10904	Toluene	108-88-3	0.7	U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1	U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8	U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8	U	0.8	5		1
10904	Trichloroethene	79-01-6	1	U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2	U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1	U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5		1
10904	Vinyl Chloride	75-01-4	1	U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8	U	0.8	5		1
10904	o-Xylene	95-47-6	0.8	U	0.8	5		1
GC/MS Volatiles	**SW-846 8260B SIM**		ug/l		ug/l	ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5	U	0.5	2.0		1
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20	U	20	50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	L111471AA	05/27/2011 21:44	Kevin A Sposito	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111461AA	05/26/2011 12:36	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E111461AA	05/26/2011 12:36	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	L111471AA	05/27/2011 21:44	Kevin A Sposito	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	11151A20A	05/31/2011 15:27	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A20A	05/31/2011 15:27	Laura M Krieger	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	189	U	189	378		10
	Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	76	U	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	380		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	76	U	76	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.7	U	3.7	9.4		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.4		5
10138	Anthracene	120-12-7	1.9	U	1.9	9.4		5
10138	Benzo(a)anthracene	56-55-3	7.0	J	3.7	9.4		5
10138	Benzo(a)pyrene	50-32-8	9.4		3.7	9.4		5
10138	Benzo(b)fluoranthene	205-99-2	25		3.7	9.4		5
10138	Benzo(g,h,i)perylene	191-24-2	6.2	J	3.7	9.4		5
10138	Benzo(k)fluoranthene	207-08-9	3.7	U	3.7	9.4		5
10138	Chrysene	218-01-9	9.6		1.9	9.4		5
10138	Dibenz(a,h)anthracene	53-70-3	3.7	U	3.7	9.4		5
10138	Fluoranthene	206-44-0	11		3.7	9.4		5
10138	Fluorene	86-73-7	3.7	U	3.7	9.4		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	5.0	J	3.7	9.4		5
10138	1-Methylnaphthalene	90-12-0	3.7	U	3.7	9.4		5
10138	2-Methylnaphthalene	91-57-6	3.7	U	3.7	9.4		5
10138	Naphthalene	91-20-3	4.2	J	3.7	9.4		5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U	3.7	9.4		5
10138	Phenanthrene	85-01-8	6.5	J	3.7	9.4		5
10138	Pyrene	129-00-0	10		3.7	9.4		5
	Reporting limits were raised due to interference from the sample matrix.							
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67	U	67	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U	45	130	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	89	U	89	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	89	U	89	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	45	U	45	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	45	U	45	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	45	U	45	130	10000000	1
10132	HMX	2691-41-0	110	U	110	330	10000000	1
10132	Nitrobenzene	98-95-3	45	U	45	130	10000000	1
10132	Nitroglycerin	55-63-0	890	U	890	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	89	U	89	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	89	U	89	130	10000000	1
10132	PETN	78-11-5	890	U	890	2,700	10000000	1
10132	RDX	121-82-4	56	U	56	130	10000000	1
10132	Tetryl	479-45-8	68	U	68	130	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	45	U	45	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	45	U	45	130	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1		1
10401	Dalapon	75-99-0	5.0	U	5.0	10		1
10401	2,4-DB	94-82-6	0.70	U	0.70	1.9		1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.4		1
10401	Dinoseb	88-85-7	0.91	U	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.91	U	0.91	1.9		1
10401	MCPA	94-74-6	86	U	86	280		1
10401	MCPP (Mecoprop)	93-65-2	85	U	85	280		1
10401	2,4,5-T	93-76-5	0.093	U	0.093	0.19		1
10401	2,4,5-TP	93-72-1	0.085	U	0.085	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	25a Formaldehyde 8315A	50-00-0	680	U	680	1,700		1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.4	U	2.4	5.7		1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.075	U	0.075	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.95		0.068	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.084	U	0.084	0.19		1
01363	Chlordane	57-74-9	0.91	U	0.91	3.9		1
01363	p,p-DDD	72-54-8	0.075	U	0.075	0.39		1
01363	p,p-DDE	72-55-9	0.38	U	0.38	0.39		1
01363	p,p-DDT	50-29-3	1.4		0.075	0.39		1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.075	U	0.075	0.39		1
01363	Endosulfan I	959-98-8	0.11	U	0.11	0.19		1
01363	Endosulfan II	33213-65-9	0.075	U	0.075	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.075	U	0.075	0.39		1
01363	Endrin	72-20-8	0.075	U	0.075	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.28	U	0.28	0.39		1
01363	Endrin Ketone	53494-70-5	0.075	U	0.075	0.39		1
01363	Heptachlor	76-44-8	0.068	U	0.068	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.11	U	0.11	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.11	U	0.11	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.5		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction were within the QC limits. The original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The concentration of beta-BHC detected in the reextract is .06 ug/kg. The concentration of DDT detected in the reextract is .18 ug/kg. The surrogate recoveries associated with the reextract were outside the lower QC limit.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	11	U	11	38		10
10225	Aroclor 5442	12642-23-8	11	U	11	38		10
10225	Aroclor 5460	11126-42-4	11	U	11	38		10
10225	PCB-1016	12674-11-2	3.8	U	3.8	19		10
10225	PCB-1221	11104-28-2	3.8	U	3.8	19		10

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	PCB-1232	11141-16-5	3.8	U	3.8	19		10
10225	PCB-1242	53469-21-9	3.8	U	3.8	19		10
10225	PCB-1248	12672-29-6	3.8	U	3.8	19		10
10225	PCB-1254	11097-69-1	3.8	U	3.8	19		10
10225	PCB-1260	11096-82-5	55		4.4	19		10
10225	PCB-1262	37324-23-5	3.8	U	3.8	19		10
10225	PCB-1268	11100-14-4	3.8	U	3.8	19		10
GC Extractable TPH	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	2.3	U	2.3	6.8		5
10199	EFH (C15-C20)	n.a.	14		2.3	6.8		5
10199	EFH (C21-C30)	n.a.	39		2.3	6.8		5
10199	EFH (C30 - C40)	n.a.	180		2.3	6.8		5
10199	EFH (C8-C11)	n.a.	2.3	U	2.3	6.8		5
GC Miscellaneous	**SW-846 8015B**		ug/kg		ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	110	U	110	570		1
10501	Isopropanol	67-63-0	110	U	110	570		1
10501	Methanol	67-56-1	110	U	110	570		1
GC Miscellaneous	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.7	U	5.7	11		1
08283	Ethylene glycol	107-21-1	5.7	U	5.7	11		1
08283	Propylene glycol	57-55-6	5.7	U	5.7	11		1
Terphenyls	**SW-846 8015B**		mg/kg		mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
Metals	**SW-846 6010B**		mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	35,000		5.67	22.5		1
07914	Boron	7440-42-8	2.11	J	1.00	5.63		1
01650	Calcium	7440-70-2	11,500		6.90	22.5		1
01654	Iron	7439-89-6	33,800		10.6	45.1		2
01656	Lithium	7439-93-2	29.7		0.25	2.3		1
01657	Magnesium	7439-95-4	7,710		2.86	11.3		1
06958	Manganese	7439-96-5	396		0.0879	0.563		1
10145	Phosphorus	7723-14-0	332		0.631	11.3		1
01662	Potassium	7440-09-7	4,580		20.3	56.3		1
01667	Sodium	7440-23-5	123		42.0	113		1
07968	Strontium	7440-24-6	45.3		0.0698	0.563		1
06969	Tin	7440-31-5	3.06	J	1.13	11.3		1
06970	Titanium	7440-32-6	1,700		0.428	1.13		1
10146	Zirconium	7440-67-7	7.37		0.946	5.63		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.435		0.0663	0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.24		0.0884	0.442		2
06126	Barium	7440-39-3	163		0.298	1.10		5
06127	Beryllium	7440-41-7	1.14		0.0177	0.110		2
06128	Cadmium	7440-43-9	0.421		0.0442	0.110		2
06131	Chromium	7440-47-3	29.7		0.133	0.442		2
06132	Cobalt	7440-48-4	11.2		0.0221	0.110		2
06133	Copper	7440-50-8	23.0		0.0729	0.442		2
06135	Lead	7439-92-1	17.9		0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.702		0.0552	0.110		2
06139	Nickel	7440-02-0	31.2		0.110	0.442		2
06141	Selenium	7782-49-2	0.148	J	0.0442	0.442		2
06142	Silver	7440-22-4	0.0755	J	0.0133	0.110		2
06145	Thallium	7440-28-0	0.503		0.0331	0.110		2
06148	Vanadium	7440-62-2	100		0.0243	0.110		2
06149	Zinc	7440-66-6	106		0.619	3.31		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0458	J	0.0031	0.109		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.2		0.91	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.91	U	0.91	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2	U	10.2	34.1		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.93	J	0.23	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.19	U	0.19	0.54		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.10		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	12.1		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 16:38	Matthew S Woods	10
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 15:11	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 10:23	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 23:36	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 19:48	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 10:14	Michele D Hamilton	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 22:11	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 05:47	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 05:50	Richard A Shober	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 18:33	Heather E Williams	5
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:28	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 20:36	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 16:22	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:27	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:22	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:26	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:26	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:19	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:41	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:10	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 21:10	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/07/2011 14:55	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 16:10	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:34	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-015-SA5DN-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg		ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	56.2		18.8	37.5		1
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	560		1
04688	Anthracene	120-12-7	54	J	19	190		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzo(a)anthracene	56-55-3	380		19	190		1
04688	Benzo(a)pyrene	50-32-8	280		19	190		1
04688	Benzo(b)fluoranthene	205-99-2	420		19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	110	J	19	190		1
04688	Benzoic acid	65-85-0	190	U	190	560		1
04688	Benzyl alcohol	100-51-6	190	U	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190		1
04688	Carbazole	86-74-8	20	J	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190		1
04688	4-Chloroaniline	106-47-8	75	U	75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190		1
04688	Chrysene	218-01-9	380		19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	32	J	19	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560		1
04688	2,4-Dinitrophenol	51-28-5	370	U	370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	370		1
04688	Fluoranthene	206-44-0	470		19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	130	J	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2-Methylphenol	95-48-7	37	U	37	190		1
04688	4-Methylphenol	106-44-5	37	U	37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	37	U	37	190		1
04688	4-Nitroaniline	100-01-6	75	U	75	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	560		1
04688	Phenanthrene	85-01-8	60	J	19	190		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	Pyrene	129-00-0	640		19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
	Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.							
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.7	U	3.7	9.3		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.3		5
10138	Benzo(k)fluoranthene	207-08-9	14		3.7	9.3		5
10138	Fluorene	86-73-7	3.7	U	3.7	9.3		5
10138	1-Methylnaphthalene	90-12-0	3.7	U	3.7	9.3		5
10138	2-Methylnaphthalene	91-57-6	3.7	U	3.7	9.3		5
10138	Naphthalene	91-20-3	3.7	U	3.7	9.3		5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U	3.7	9.3		5
	Reporting limits were raised due to interference from the sample matrix.							
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67	U	67	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U	45	130	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90	U	90	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90	U	90	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	45	U	45	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	45	U	45	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	45	U	45	130	10000000	1
10132	HMX	2691-41-0	110	U	110	340	10000000	1
10132	Nitrobenzene	98-95-3	45	U	45	130	10000000	1
10132	Nitroglycerin	55-63-0	900	U	900	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	90	U	90	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	90	U	90	130	10000000	1
10132	PETN	78-11-5	900	U	900	2,700	10000000	1
10132	RDX	121-82-4	56	U	56	130	10000000	1
10132	Tetryl	479-45-8	69	U	69	130	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	45	U	45	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	45	U	45	130	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0		1
10401	Dalapon	75-99-0	4.9	U	4.9	10		1
10401	2,4-DB	94-82-6	0.69	U	0.69	1.9		1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.3		1
10401	Dinoseb	88-85-7	0.89	U	0.89	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U	0.89	1.9		1
10401	MCPA	94-74-6	85	U	85	280		1
10401	MCPP (Mecoprop)	93-65-2	84	U	84	280		1
10401	2,4,5-T	93-76-5	0.092	U	0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.085	J	0.084	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
HPLC Organics	**SW-846 8315A**		ug/kg		ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	670	U	670	1,700		1
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.074	U	0.074	0.19		1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.19		1
01363	Beta BHC	319-85-7	0.33		0.067	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.056	J	0.038	0.19		1
01363	Chlordane	57-74-9	2.3	J	0.90	3.8		1
01363	p,p-DDD	72-54-8	0.074	U	0.074	0.38		1
01363	p,p-DDE	72-55-9	0.37	U	0.37	0.38		1
01363	p,p-DDT	50-29-3	7.0		0.74	3.8		10
01363	Delta BHC	319-86-8	0.040	U	0.040	0.19		1
01363	Dieldrin	60-57-1	1.6	U	1.6	1.6		1
01363	Endosulfan I	959-98-8	0.049	U	0.049	0.19		1
01363	Endosulfan II	33213-65-9	0.074	U	0.074	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.074	U	0.074	0.38		1
01363	Endrin	72-20-8	0.074	U	0.074	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.074	U	0.074	0.38		1
01363	Endrin Ketone	53494-70-5	0.16	U	0.16	0.38		1
01363	Heptachlor	76-44-8	0.067	U	0.067	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.19	U	0.19	0.19		1
01363	Methoxychlor	72-43-5	0.75	U	0.75	1.9		1
01363	Mirex	2385-85-5	0.074	U	0.074	0.38		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.4		1
	The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
	The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction were within the QC limits. The original data is reported.							
	Reporting limits were raised due to interference from the sample matrix.							
	The concentration of beta-BHC detected in the reextract is .06 ug/kg. The concentration of DDT detected in the reextract is 2.5 ug/kg. The surrogate recoveries associated with the reextract were outside the lower QC limit.							
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	11	U	11	37		10
10225	Aroclor 5442	12642-23-8	11	U	11	37		10
10225	Aroclor 5460	11126-42-4	11	U	11	37		10
10225	PCB-1016	12674-11-2	3.7	U	3.7	19		10
10225	PCB-1221	11104-28-2	3.7	U	3.7	19		10

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1232	11141-16-5	3.7	U	3.7	19		10
10225	PCB-1242	53469-21-9	3.7	U	3.7	19		10
10225	PCB-1248	12672-29-6	3.7	U	3.7	19		10
10225	PCB-1254	11097-69-1	3.7	U	3.7	19		10
10225	PCB-1260	11096-82-5	140		4.4	19		10
10225	PCB-1262	37324-23-5	3.7	U	3.7	19		10
10225	PCB-1268	11100-14-4	3.7	U	3.7	19		10
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	4.5	U	4.5	13		10
10199	EFH (C15-C20)	n.a.	8.2	J	4.5	13		10
10199	EFH (C21-C30)	n.a.	95		4.5	13		10
10199	EFH (C30 - C40)	n.a.	450		4.5	13		10
10199	EFH (C8-C11)	n.a.	4.5	U	4.5	13		10
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	560		1
10501	Isopropanol	67-63-0	110	U	110	560		1
10501	Methanol	67-56-1	110	U	110	560		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.6	U	5.6	11		1
08283	Ethylene glycol	107-21-1	5.6	U	5.6	11		1
08283	Propylene glycol	57-55-6	5.6	U	5.6	11		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	5.3		1.7	3.9		1
10318	o-Terphenyl	84-15-1	1.9	J	1.7	3.9		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	3.9		1
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,400		5.60	22.3		1
07914	Boron	7440-42-8	0.991	U	0.991	5.57		1
01650	Calcium	7440-70-2	12,200		6.83	22.3		1
01654	Iron	7439-89-6	30,900		10.5	44.5		2
01656	Lithium	7439-93-2	26.4		0.25	2.2		1
01657	Magnesium	7439-95-4	7,030		2.83	11.1		1
06958	Manganese	7439-96-5	382		0.0869	0.557		1
10145	Phosphorus	7723-14-0	389		0.624	11.1		1
01662	Potassium	7440-09-7	4,340		20.0	55.7		1
01667	Sodium	7440-23-5	129		41.5	111		1
07968	Strontium	7440-24-6	45.1		0.0691	0.557		1
06969	Tin	7440-31-5	2.88	J	1.11	11.1		1
06970	Titanium	7440-32-6	1,530		0.423	1.11		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10146	Zirconium	7440-67-7	6.61		0.936	5.57		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.300		0.0662	0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.68		0.0882	0.441		2
06126	Barium	7440-39-3	159		0.119	0.441		2
06127	Beryllium	7440-41-7	0.833		0.0176	0.110		2
06128	Cadmium	7440-43-9	0.318		0.0441	0.110		2
06131	Chromium	7440-47-3	28.9		0.132	0.441		2
06132	Cobalt	7440-48-4	10.3		0.0221	0.110		2
06133	Copper	7440-50-8	17.6		0.0728	0.441		2
06135	Lead	7439-92-1	12.7		0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.509		0.0551	0.110		2
06139	Nickel	7440-02-0	21.8		0.110	0.441		2
06141	Selenium	7782-49-2	0.114	J	0.0441	0.441		2
06142	Silver	7440-22-4	0.0617	J	0.0132	0.110		2
06145	Thallium	7440-28-0	0.358		0.0331	0.110		2
06148	Vanadium	7440-62-2	74.2		0.0243	0.110		2
06149	Zinc	7440-66-6	88.4		0.618	3.31		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032	U	0.0032	0.111		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.9		0.90	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.3	J	0.90	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1	U	10.1	33.7		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.70	J	0.22	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.19	U	0.19	0.54		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.24		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	11.1		0.50	0.50		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 20:39	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 15:38	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 11:01	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 00:18	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 19:58	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 10:41	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 06:28	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 06:41	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 07:23	Richard A Shober	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 18:58	Heather E Williams	10
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:43	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 20:49	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 17:07	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:31	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:29	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:28	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:28	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:29	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:29	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:42	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:24	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 21:24	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 18:54	William L Hamaker Jr	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 16:22	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:35	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzo(a)anthracene	56-55-3	130	J	18	180		1
04688	Benzo(a)pyrene	50-32-8	100	J	18	180		1
04688	Benzo(b)fluoranthene	205-99-2	180	J	18	180		1
04688	Benzo(g,h,i)perylene	191-24-2	41	J	18	180		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Butylbenzylphthalate	85-68-7	28	J	18	180		1
04688	Di-n-butylphthalate	84-74-2	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180		1
04688	4-Chloroaniline	106-47-8	74	U	74	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180		1
04688	Chrysene	218-01-9	100	J	18	180		1
04688	Dibenz(a,h)anthracene	53-70-3	22	J	18	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	Diethylphthalate	84-66-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180		1
04688	Dimethylphthalate	131-11-3	18	U	18	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1
04688	2,4-Dinitrophenol	51-28-5	370	U	370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	37	J	18	370		1
04688	Fluoranthene	206-44-0	120	J	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	74	U	74	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	53	J	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	37	U	37	180		1
04688	4-Methylphenol	106-44-5	37	U	37	180		1

3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	37	U	37	180		1
04688	4-Nitroaniline	100-01-6	74	U	74	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	18	U	18	180		1
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	Pyrene	129-00-0	170	J	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
	Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.							
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.7	U	3.7	9.3		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.3		5
10138	Anthracene	120-12-7	2.2	J	1.9	9.3		5
10138	Benzo(k)fluoranthene	207-08-9	18		3.7	9.3		5
10138	Fluorene	86-73-7	3.7	U	3.7	9.3		5
10138	1-Methylnaphthalene	90-12-0	3.7	U	3.7	9.3		5
10138	2-Methylnaphthalene	91-57-6	3.7	U	3.7	9.3		5
10138	Naphthalene	91-20-3	3.7	U	3.7	9.3		5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U	3.7	9.3		5
10138	Phenanthrene	85-01-8	5.9	J	3.7	9.3		5
	Reporting limits were raised due to interference from the sample matrix.							
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0		1
10401	Dalapon	75-99-0	4.9	U	4.9	10		1
10401	2,4-DB	94-82-6	0.69	U	0.69	1.9		1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.3		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	Dinoseb	88-85-7	0.89	U	0.89	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U	0.89	1.9		1
10401	MCPA	94-74-6	97	J	85	280		1
10401	MCPP (Mecoprop)	93-65-2	84	U	84	280		1
10401	2,4,5-T	93-76-5	0.22		0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.18	J	0.084	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.074	U	0.074	0.18		1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.18		1
01363	Beta BHC	319-85-7	0.067	U	0.067	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.038	U	0.038	0.18		1
01363	Chlordane	57-74-9	0.89	U	0.89	3.8		1
01363	p,p-DDD	72-54-8	0.074	U	0.074	0.38		1
01363	p,p-DDE	72-55-9	0.49	U	0.49	0.49		1
01363	p,p-DDT	50-29-3	12		0.74	3.8		10
01363	Delta BHC	319-86-8	0.040	U	0.040	0.18		1
01363	Dieldrin	60-57-1	2.2	U	2.2	3.8		10
01363	Endosulfan I	959-98-8	0.049	U	0.049	0.18		1
01363	Endosulfan II	33213-65-9	0.074	U	0.074	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.074	U	0.074	0.38		1
01363	Endrin	72-20-8	0.074	U	0.074	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.074	U	0.074	0.38		1
01363	Endrin Ketone	53494-70-5	0.074	U	0.074	0.38		1
01363	Heptachlor	76-44-8	0.067	U	0.067	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.28	U	0.28	0.28		1
01363	Methoxychlor	72-43-5	1.1	U	1.1	1.8		1
01363	Mirex	2385-85-5	0.48	U	0.48	0.48		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.4		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction were within the QC limits. The original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The concentration of DDT detected in the reextract is 7.0 ug/kg.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	5.6	U	5.6	18		5
10225	Aroclor 5442	12642-23-8	5.6	U	5.6	18		5
10225	Aroclor 5460	11126-42-4	5.6	U	5.6	18		5
10225	PCB-1016	12674-11-2	1.8	U	1.8	9.5		5
10225	PCB-1221	11104-28-2	1.8	U	1.8	9.5		5
10225	PCB-1232	11141-16-5	1.8	U	1.8	9.5		5
10225	PCB-1242	53469-21-9	1.8	U	1.8	9.5		5
10225	PCB-1248	12672-29-6	1.8	U	1.8	9.5		5
10225	PCB-1254	11097-69-1	1.8	U	1.8	9.5		5
10225	PCB-1260	11096-82-5	32		2.2	9.5		5
10225	PCB-1262	37324-23-5	1.8	U	1.8	9.5		5
10225	PCB-1268	11100-14-4	1.8	U	1.8	9.5		5
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,000		5.58	22.2		1
07914	Boron	7440-42-8	0.987	U	0.987	5.54		1
01650	Calcium	7440-70-2	12,200		6.80	22.2		1
01654	Iron	7439-89-6	32,400		10.4	44.3		2
01656	Lithium	7439-93-2	25.5		0.24	2.2		1
01657	Magnesium	7439-95-4	6,910		2.82	11.1		1
06958	Manganese	7439-96-5	393		0.0865	0.554		1
10145	Phosphorus	7723-14-0	454		0.621	11.1		1
01662	Potassium	7440-09-7	4,510		20.0	55.4		1
01667	Sodium	7440-23-5	129		41.4	111		1
07968	Strontium	7440-24-6	45.2		0.0687	0.554		1
06969	Tin	7440-31-5	2.96	J	1.11	11.1		1
06970	Titanium	7440-32-6	1,500		0.421	1.11		1
10146	Zirconium	7440-67-7	5.80		0.931	5.54		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.365		0.0652	0.217		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.77		0.0870	0.435		2
06126	Barium	7440-39-3	140		0.117	0.435		2
06127	Beryllium	7440-41-7	0.880		0.0174	0.109		2
06128	Cadmium	7440-43-9	0.391		0.0435	0.109		2
06131	Chromium	7440-47-3	25.4		0.130	0.435		2
06132	Cobalt	7440-48-4	9.01		0.0217	0.109		2
06133	Copper	7440-50-8	24.4		0.0718	0.435		2
06135	Lead	7439-92-1	17.4		0.0113	0.217		2
06138	Molybdenum	7439-98-7	0.929		0.0544	0.109		2
06139	Nickel	7440-02-0	25.5		0.109	0.435		2
06141	Selenium	7782-49-2	0.116	J	0.0435	0.435		2
06142	Silver	7440-22-4	0.0786	J	0.0130	0.109		2
06145	Thallium	7440-28-0	0.449		0.0326	0.109		2
06148	Vanadium	7440-62-2	90.3		0.0239	0.109		2
06149	Zinc	7440-66-6	133		0.609	3.26		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		**SW-846 7471A**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury		7439-97-6	0.0031 U	0.0031	0.109		1
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride		16984-48-8	2.0	0.90	1.1		1
		EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0		14797-73-0	10.1 U	10.1	33.6		1
		SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199		18540-29-9	0.38 J	0.22	1.1		1
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C		n.a.	8.10	0.0100	0.0100		1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	Moisture Content by 160.3		n.a.	10.7	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 16:04	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 11:32	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 11:09	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 07:07	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 07:21	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 07:41	Richard A Shober	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 09:02	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:51	David K Beck	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:51	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:51	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:06	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:06	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:01	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:38	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 19:16	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 16:27	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	193	U	193	385		10
	Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	580		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	580		1
04688	Benzyl alcohol	100-51-6	190	U	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	21	J	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580		1
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	380		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	580		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.8	U	3.8	9.6		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.6		5
10138	Anthracene	120-12-7	1.9	U	1.9	9.6		5
10138	Benzo(a)anthracene	56-55-3	5.2	J	3.8	9.6		5
10138	Benzo(a)pyrene	50-32-8	6.2	J	3.8	9.6		5
10138	Benzo(b)fluoranthene	205-99-2	12		3.8	9.6		5
10138	Benzo(g,h,i)perylene	191-24-2	4.8	J	3.8	9.6		5
10138	Benzo(k)fluoranthene	207-08-9	4.6	J	3.8	9.6		5
10138	Chrysene	218-01-9	6.8	J	1.9	9.6		5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U	3.8	9.6		5
10138	Fluoranthene	206-44-0	11		3.8	9.6		5
10138	Fluorene	86-73-7	3.8	U	3.8	9.6		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U	3.8	9.6		5
10138	1-Methylnaphthalene	90-12-0	3.8	U	3.8	9.6		5
10138	2-Methylnaphthalene	91-57-6	3.8	U	3.8	9.6		5
10138	Naphthalene	91-20-3	3.8	U	3.8	9.6		5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U	3.8	9.6		5
10138	Phenanthrene	85-01-8	7.2	J	3.8	9.6		5
10138	Pyrene	129-00-0	8.4	J	3.8	9.6		5
	Reporting limits were raised due to interference from the sample matrix.							
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67	U	67	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U	45	130	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	89	U	89	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	89	U	89	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	45	U	45	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	45	U	45	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	45	U	45	130	10000000	1
10132	HMX	2691-41-0	110	U	110	330	10000000	1
10132	Nitrobenzene	98-95-3	45	U	45	130	10000000	1
10132	Nitroglycerin	55-63-0	890	U	890	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	89	U	89	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	89	U	89	130	10000000	1
10132	PETN	78-11-5	890	U	890	2,700	10000000	1
10132	RDX	121-82-4	56	U	56	130	10000000	1
10132	Tetryl	479-45-8	68	U	68	130	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	45	U	45	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	45	U	45	130	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U	1.4	4.2		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	0.72	U	0.72	2.0		1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.93	U	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93	U	0.93	2.0		1
10401	MCPA	94-74-6	88	U	88	290		1
10401	MCPP (Mecoprop)	93-65-2	87	U	87	290		1
10401	2,4,5-T	93-76-5	0.095	U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.087	U	0.087	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	25a Formaldehyde 8315A	50-00-0	690	U	690	1,700		1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069	U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	0.92	U	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.076	U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.12	U	0.12	0.39		1
01363	p,p-DDT	50-29-3	0.70		0.076	0.39		1
01363	Delta BHC	319-86-8	0.042	U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.076	U	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076	U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076	U	0.076	0.39		1
01363	Endrin	72-20-8	0.076	U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.10	U	0.10	0.39		1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069	U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039	U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.21	U	0.21	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

DDT was not detected in the reextract.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.5	J	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	2.0		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0		1
10225	PCB-1260	11096-82-5	5.8		0.45	2.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.93	U	0.93	2.8		2
10199	EFH (C15-C20)	n.a.	5.4		0.93	2.8		2
10199	EFH (C21-C30)	n.a.	21		0.93	2.8		2
10199	EFH (C30 - C40)	n.a.	61		0.93	2.8		2
10199	EFH (C8-C11)	n.a.	0.93	U	0.93	2.8		2
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	120	U	120	580		1
10501	Isopropanol	67-63-0	120	U	120	580		1
10501	Methanol	67-56-1	120	U	120	580		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.8	U	5.8	12		1
08283	Ethylene glycol	107-21-1	5.8	U	5.8	12		1
08283	Propylene glycol	57-55-6	5.8	U	5.8	12		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.1		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.1		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.1		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	36,100		5.67	22.5		1
07914	Boron	7440-42-8	1.80	J	1.00	5.63		1
01650	Calcium	7440-70-2	11,000		6.90	22.5		1
01654	Iron	7439-89-6	34,200		10.6	45.1		2
01656	Lithium	7439-93-2	30.7		0.25	2.3		1
01657	Magnesium	7439-95-4	7,900		2.86	11.3		1
06958	Manganese	7439-96-5	433		0.0879	0.563		1
10145	Phosphorus	7723-14-0	297		0.631	11.3		1
01662	Potassium	7440-09-7	4,540		20.3	56.3		1
01667	Sodium	7440-23-5	188		42.0	113		1
07968	Strontium	7440-24-6	49.1		0.0698	0.563		1
06969	Tin	7440-31-5	3.04	J	1.13	11.3		1
06970	Titanium	7440-32-6	1,680		0.428	1.13		1
10146	Zirconium	7440-67-7	7.71		0.946	5.63		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.383		0.0682	0.227		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.55		0.0910	0.455		2
06126	Barium	7440-39-3	183		0.307	1.14		5
06127	Beryllium	7440-41-7	1.15		0.0182	0.114		2
06128	Cadmium	7440-43-9	0.417		0.0455	0.114		2
06131	Chromium	7440-47-3	32.6		0.136	0.455		2
06132	Cobalt	7440-48-4	10.2		0.0227	0.114		2
06133	Copper	7440-50-8	22.0		0.0751	0.455		2
06135	Lead	7439-92-1	14.7		0.0118	0.227		2
06138	Molybdenum	7439-98-7	0.636		0.0569	0.114		2
06139	Nickel	7440-02-0	29.4		0.114	0.455		2
06141	Selenium	7782-49-2	0.144	J	0.0455	0.455		2
06142	Silver	7440-22-4	0.0757	J	0.0136	0.114		2
06145	Thallium	7440-28-0	0.497		0.0341	0.114		2
06148	Vanadium	7440-62-2	98.3		0.0250	0.114		2
06149	Zinc	7440-66-6	96.9		0.637	3.41		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0031	U	0.0031	0.110		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	6.2		0.93	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	2.0		0.93	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4	U	10.4	34.8		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.84	J	0.23	1.2		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.57		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.14		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	13.8		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 16:55	Matthew S Woods	10
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 16:31	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 12:02	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 02:26	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 20:08	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 11:37	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 07:48	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:00	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 18:08	Heather E Williams	2
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:58	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:02	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 14:52	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:34	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:25	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:30	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:30	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:32	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:32	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:43	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:52	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 21:52	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 19:38	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 16:39	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:36	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-019-SA5DN-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	194	U	194	388		10
	Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	580		1
04688	Benzidine	92-87-5	1,400	U	1,400	3,900		1
04688	Benzoic acid	65-85-0	190	U	190	580		1
04688	Benzyl alcohol	100-51-6	190	U	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	190		1
04688	4-Chloroaniline	106-47-8	78	U	78	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580		1
04688	2,4-Dinitrophenol	51-28-5	390	U	390	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	78	U	78	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	39	U	39	190		1
04688	4-Methylphenol	106-44-5	39	U	39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	39	U	39	190		1
04688	4-Nitroaniline	100-01-6	78	U	78	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	580		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.42	J	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	1.7	J	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	3.1		0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	4.9		0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	1.7	J	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	5.4		0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21		1
10138	Chrysene	218-01-9	3.1		0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.9	U	6.9	21		1
10138	Fluoranthene	206-44-0	4.5		0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.6	J	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76	U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21		1
10138	Phenanthrene	85-01-8	1.9	J	0.76	1.9		1
10138	Pyrene	129-00-0	3.5		0.76	1.9		1
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	68	U	68	140	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	46	U	46	140	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	91	U	91	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	91	U	91	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	46	U	46	140	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	46	U	46	140	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	46	U	46	140	10000000	1
10132	HMX	2691-41-0	110	U	110	340	10000000	1
10132	Nitrobenzene	98-95-3	46	U	46	140	10000000	1
10132	Nitroglycerin	55-63-0	910	U	910	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	91	U	91	140	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	140	10000000	1
10132	4-Nitrotoluene	99-99-0	91	U	91	140	10000000	1
10132	PETN	78-11-5	910	U	910	2,700	10000000	1
10132	RDX	121-82-4	57	U	57	140	10000000	1
10132	Tetryl	479-45-8	70	U	70	140	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	46	U	46	140	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	46	U	46	140	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U	1.4	4.2		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	0.72	U	0.72	2.0		1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.93	U	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93	U	0.93	2.0		1
10401	MCPA	94-74-6	100	J	88	290		1
10401	MCPP (Mecoprop)	93-65-2	87	U	87	290		1
10401	2,4,5-T	93-76-5	0.095	U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.087	U	0.087	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	25a Formaldehyde 8315A	50-00-0	690	U	690	1,700		1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.077	U	0.077	0.19		1
01363	Alpha BHC	319-84-6	0.040	U	0.040	0.19		1
01363	Beta BHC	319-85-7	0.070	U	0.070	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.040	U	0.040	0.19		1
01363	Chlordane	57-74-9	1.1	J	0.93	4.0		1
01363	p,p-DDD	72-54-8	0.077	U	0.077	0.40		1
01363	p,p-DDE	72-55-9	0.12	U	0.12	0.40		1
01363	p,p-DDT	50-29-3	1.0		0.077	0.40		1
01363	Delta BHC	319-86-8	0.042	U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.077	U	0.077	0.40		1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.26	U	0.26	0.40		1
01363	Endosulfan Sulfate	1031-07-8	0.077	U	0.077	0.40		1
01363	Endrin	72-20-8	0.094	U	0.094	0.40		1
01363	Endrin Aldehyde	7421-93-4	0.094	U	0.094	0.40		1
01363	Endrin Ketone	53494-70-5	0.077	U	0.077	0.40		1
01363	Heptachlor	76-44-8	0.070	U	0.070	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.047	U	0.047	0.19		1
01363	Methoxychlor	72-43-5	0.40	U	0.40	1.9		1
01363	Mirex	2385-85-5	0.10	U	0.10	0.40		1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.7		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The concentration of DDT detected in the reextract is .24 ug/kg. Chlordane was not detected in the reextract.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	9.7		1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	2.0		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1260	11096-82-5	6.8		0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.47	U	0.47	1.4		1
10199	EFH (C15-C20)	n.a.	3.9		0.47	1.4		1
10199	EFH (C21-C30)	n.a.	20		0.47	1.4		1
10199	EFH (C30 - C40)	n.a.	26		0.47	1.4		1
10199	EFH (C8-C11)	n.a.	0.47	U	0.47	1.4		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	120	U	120	580		1
10501	Isopropanol	67-63-0	120	U	120	580		1
10501	Methanol	67-56-1	120	U	120	580		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.8	U	5.8	12		1
08283	Ethylene glycol	107-21-1	5.8	U	5.8	12		1
08283	Propylene glycol	57-55-6	5.8	U	5.8	12		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.1		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.1		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.1		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	38,800		5.80	23.1		1
07914	Boron	7440-42-8	1.71	J	1.03	5.76		1
01650	Calcium	7440-70-2	9,700		7.07	23.1		1
01654	Iron	7439-89-6	34,400		10.9	46.1		2
01656	Lithium	7439-93-2	32.3		0.25	2.3		1
01657	Magnesium	7439-95-4	8,080		2.93	11.5		1
06958	Manganese	7439-96-5	370		0.0899	0.576		1
10145	Phosphorus	7723-14-0	239		0.645	11.5		1
01662	Potassium	7440-09-7	4,470		20.7	57.6		1
01667	Sodium	7440-23-5	163		43.0	115		1
07968	Strontium	7440-24-6	46.6		0.0715	0.576		1
06969	Tin	7440-31-5	2.96	J	1.15	11.5		1
06970	Titanium	7440-32-6	1,700		0.438	1.15		1
10146	Zirconium	7440-67-7	7.90		0.968	5.76		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.351		0.0685	0.228		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.36		0.0913	0.457		2
06126	Barium	7440-39-3	204		0.123	0.457		2
06127	Beryllium	7440-41-7	1.02		0.0183	0.114		2
06128	Cadmium	7440-43-9	0.458		0.0457	0.114		2
06131	Chromium	7440-47-3	29.2		0.137	0.457		2
06132	Cobalt	7440-48-4	9.04		0.0228	0.114		2
06133	Copper	7440-50-8	21.0		0.0753	0.457		2
06135	Lead	7439-92-1	14.7		0.0119	0.228		2
06138	Molybdenum	7439-98-7	0.632		0.0571	0.114		2
06139	Nickel	7440-02-0	28.4		0.114	0.457		2
06141	Selenium	7782-49-2	0.104	J	0.0457	0.457		2
06142	Silver	7440-22-4	0.0740	J	0.0137	0.114		2
06145	Thallium	7440-28-0	0.463		0.0342	0.114		2
06148	Vanadium	7440-62-2	96.6		0.0251	0.114		2
06149	Zinc	7440-66-6	89.9		0.639	3.42		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032	U	0.0032	0.111		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	5.6		0.93	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.5	J	0.93	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.5	U	10.5	34.9		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.81	J	0.23	1.2		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.56		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.09		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	14.1		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 17:13	Matthew S Woods	10
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 16:58	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 17:23	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 03:08	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 20:17	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 12:04	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 08:15	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:18	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 17:18	Heather E Williams	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:13	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:15	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 15:37	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:38	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:35	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:31	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:31	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:35	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:35	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:45	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 23:18	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 23:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 21:28	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 16:50	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:37	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg		ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	19.1	U	19.1	38.3		1
	The surrogate recoveries are outside of QC limits. The matrix spike sample was analyzed and surrogate recoveries are again outside of QC limits, indicating a matrix effect.							
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	27	J	19	380		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	2.0		0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21		1
10138	Chrysene	218-01-9	0.96	J	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21		1
10138	Fluoranthene	206-44-0	0.76	U	0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76	U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21		1
10138	Phenanthrene	85-01-8	0.76	U	0.76	1.9		1
10138	Pyrene	129-00-0	0.76	U	0.76	1.9		1
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	68	U	68	140	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U	45	140	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90	U	90	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90	U	90	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	45	U	45	140	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	45	U	45	140	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	45	U	45	140	10000000	1
10132	HMX	2691-41-0	110	U	110	340	10000000	1
10132	Nitrobenzene	98-95-3	45	U	45	140	10000000	1
10132	Nitroglycerin	55-63-0	900	U	900	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	90	U	90	140	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	140	10000000	1
10132	4-Nitrotoluene	99-99-0	90	U	90	140	10000000	1
10132	PETN	78-11-5	900	U	900	2,700	10000000	1
10132	RDX	121-82-4	56	U	56	140	10000000	1
10132	Tetryl	479-45-8	69	U	69	140	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	45	U	45	140	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	45	U	45	140	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	0.71	U	0.71	2.0		1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.92	U	0.92	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U	0.92	2.0		1
10401	MCPA	94-74-6	87	U	87	290		1
10401	MCPP (Mecoprop)	93-65-2	86	U	86	290		1
10401	2,4,5-T	93-76-5	0.094	U	0.094	0.20		1
10401	2,4,5-TP	93-72-1	0.16	J	0.086	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
the lowest reporting limits attainable.								
HPLC Organics	**SW-846 8315A**		ug/kg		ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	690	U	690	1,700		1
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069	U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	0.98	J	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.076	U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.076	U	0.076	0.39		1
01363	p,p-DDT	50-29-3	0.52		0.076	0.39		1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.11	J	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.050	U	0.050	0.19		1
01363	Endosulfan II	33213-65-9	0.076	U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076	U	0.076	0.39		1
01363	Endrin	72-20-8	0.076	U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.076	U	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069	U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039	U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.12	J	0.076	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

The concentration of DDT detected in the reextract is .17 ug/kg. The surrogate recoveries associated with the reextract were outside the lower QC limit.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	1.9		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9		1
10225	PCB-1260	11096-82-5	0.45	U	0.45	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	4.6	U	4.6	14		10
10199	EFH (C15-C20)	n.a.	6.4	J	4.6	14		10
10199	EFH (C21-C30)	n.a.	60		4.6	14		10
10199	EFH (C30 - C40)	n.a.	290		4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6	U	4.6	14		10
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	570		1
10501	Isopropanol	67-63-0	110	U	110	570		1
10501	Methanol	67-56-1	110	U	110	570		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.7	U	5.7	11		1
08283	Ethylene glycol	107-21-1	5.7	U	5.7	11		1
08283	Propylene glycol	57-55-6	5.7	U	5.7	11		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,200		5.66	22.5		1
07914	Boron	7440-42-8	2.82	J	1.00	5.63		1
01650	Calcium	7440-70-2	18,500		6.90	22.5		1
01654	Iron	7439-89-6	32,000		10.6	45.0		2
01656	Lithium	7439-93-2	26.1		0.25	2.3		1
01657	Magnesium	7439-95-4	6,650		2.86	11.3		1
06958	Manganese	7439-96-5	451		0.0878	0.563		1
10145	Phosphorus	7723-14-0	357		0.630	11.3		1
01662	Potassium	7440-09-7	4,400		20.3	56.3		1
01667	Sodium	7440-23-5	143		42.0	113		1
07968	Strontium	7440-24-6	41.8		0.0698	0.563		1
06969	Tin	7440-31-5	3.22	J	1.13	11.3		1
06970	Titanium	7440-32-6	1,660		0.428	1.13		1
10146	Zirconium	7440-67-7	6.98		0.945	5.63		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.510		0.0682	0.227		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.16		0.0909	0.455		2
06126	Barium	7440-39-3	199		0.123	0.455		2
06127	Beryllium	7440-41-7	1.01		0.0182	0.114		2
06128	Cadmium	7440-43-9	0.727		0.0455	0.114		2
06131	Chromium	7440-47-3	30.1		0.136	0.455		2
06132	Cobalt	7440-48-4	13.0		0.0227	0.114		2
06133	Copper	7440-50-8	22.8		0.0750	0.455		2
06135	Lead	7439-92-1	20.0		0.0118	0.227		2
06138	Molybdenum	7439-98-7	1.50		0.0568	0.114		2
06139	Nickel	7440-02-0	28.9		0.114	0.455		2
06141	Selenium	7782-49-2	0.232	J	0.0455	0.455		2
06142	Silver	7440-22-4	0.0712	J	0.0136	0.114		2
06145	Thallium	7440-28-0	0.491		0.0341	0.114		2
06148	Vanadium	7440-62-2	91.4		0.0250	0.114		2
06149	Zinc	7440-66-6	162		0.637	3.41		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0463	J	0.0032	0.110		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.7		0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.6	J	0.92	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.4		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.74	J	0.23	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.55		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.04		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	12.9		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 21:32	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 05:37	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 15:55	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 03:50	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 20:27	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 08:51	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 08:43	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:37	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 19:23	Heather E Williams	10
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:28	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:28	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 17:52	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:06	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 06:58	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:02	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:02	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 06:58	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 06:58	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/07/2011 00:02	David K Beck	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:46	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 22:07	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 22:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 20:00	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 17:07	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:41	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg		ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	229		19.1	38.3		1
The surrogate recoveries are outside of QC limits. The background sample was analyzed and surrogate recoveries are again outside of QC limits, indicating a matrix effect.								
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,800		19	190		1
04688	Acenaphthylene	208-96-8	1,900		19	190		1
04688	Aniline	62-53-3	1,400		190	570		1
04688	Anthracene	120-12-7	1,900		19	190		1
04688	Benzidine	92-87-5	2,500	J	1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,900		19	190		1
04688	Benzo(a)pyrene	50-32-8	1,900		19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,900		19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,900		19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,800		19	190		1
04688	Benzoic acid	65-85-0	1,100		190	570		1
04688	Benzyl alcohol	100-51-6	2,100		190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	1,700		19	190		1
04688	Butylbenzylphthalate	85-68-7	2,100		19	190		1
04688	Di-n-butylphthalate	84-74-2	1,800		19	190		1
04688	Carbazole	86-74-8	1,900		19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	2,100		38	190		1
04688	4-Chloroaniline	106-47-8	1,500		76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,700		19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700		19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,600		19	190		1
04688	2-Chloronaphthalene	91-58-7	2,700		19	190		1
04688	2-Chlorophenol	95-57-8	1,900		19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900		38	190		1
04688	Chrysene	218-01-9	1,900		19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,900		19	190		1
04688	Dibenzofuran	132-64-9	1,900		19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,500		19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,400		19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,500		19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,500		110	380		1
04688	2,4-Dichlorophenol	120-83-2	2,000		19	190		1
04688	Diethylphthalate	84-66-2	1,900		19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,800		38	190		1
04688	3,5-Dimethylphenol	108-68-9	2,000		38	190		1
04688	Dimethylphthalate	131-11-3	1,800		19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,500		190	570		1
04688	2,4-Dinitrophenol	51-28-5	2,500		380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	2,100		38	190		1
04688	2,6-Dinitrotoluene	606-20-2	1,900		19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	1,800		19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,200		19	380		1
04688	Fluoranthene	206-44-0	1,700		19	190		1
04688	Fluorene	86-73-7	1,900		19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorobenzene	118-74-1	1,800	19	190		1
04688	Hexachlorobutadiene	87-68-3	1,300	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	2,600	190	570		1
04688	Hexachloroethane	67-72-1	1,400	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,900	19	190		1
04688	Isophorone	78-59-1	1,800	19	190		1
04688	1-Methylnaphthalene	90-12-0	1,800	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,700	19	190		1
04688	2-Methylphenol	95-48-7	1,900	38	190		1
04688	4-Methylphenol	106-44-5	2,100	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,700	19	190		1
04688	2-Nitroaniline	88-74-4	2,100	19	190		1
04688	3-Nitroaniline	99-09-2	2,100	38	190		1
04688	4-Nitroaniline	100-01-6	1,700	76	190		1
04688	Nitrobenzene	98-95-3	1,700	19	190		1
04688	2-Nitrophenol	88-75-5	1,900	19	190		1
04688	4-Nitrophenol	100-02-7	1,800	190	570		1
04688	N-Nitrosodimethylamine	62-75-9	1,600	38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,900	19	190		1
04688	Pentachlorophenol	87-86-5	1,600	190	570		1
04688	Phenanthrene	85-01-8	1,800	19	190		1
04688	Phenol	108-95-2	2,000	19	190		1
04688	Pyrene	129-00-0	2,100	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,600	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	1,900	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	1,900	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene						
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	39	0.76	1.9		1
10138	Acenaphthylene	208-96-8	38	0.38	1.9		1
10138	Anthracene	120-12-7	40	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	37	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	48	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	53	0.76	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Benzo(g,h,i)perylene	191-24-2	32		0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	49		0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	40		6.9	21		1
10138	Di-n-butylphthalate	84-74-2	47		6.9	21		1
10138	Chrysene	218-01-9	38		0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	37		0.76	1.9		1
10138	Diethylphthalate	84-66-2	41		6.9	21		1
10138	Dimethylphthalate	131-11-3	40		6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	39		6.9	21		1
10138	Fluoranthene	206-44-0	43		0.76	1.9		1
10138	Fluorene	86-73-7	40		0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	35		0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	39		0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	35		0.76	1.9		1
10138	Naphthalene	91-20-3	37		0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	39		0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	53		6.9	21		1
10138	Phenanthrene	85-01-8	39		0.76	1.9		1
10138	Pyrene	129-00-0	34		0.76	1.9		1
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	2,600		69	140		1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	2,600		46	140		1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	92	U	92	280		1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	92	U	92	280		1
10132	1,3-Dinitrobenzene	99-65-0	2,700		46	140		1
10132	2,4-Dinitrotoluene	121-14-2	2,500		46	140		1
10132	2,6-Dinitrotoluene	606-20-2	2,500		46	140		1
10132	HMX	2691-41-0	2,300		110	340		1
10132	Nitrobenzene	98-95-3	2,600		46	140		1
10132	Nitroglycerin	55-63-0	56,000		920	2,800		1
10132	2-Nitrotoluene	88-72-2	2,400		92	140		1
10132	3-Nitrotoluene	99-08-1	2,600		110	140		1
10132	4-Nitrotoluene	99-99-0	2,400		92	140		1
10132	PETN	78-11-5	70,000		920	2,800		1
10132	RDX	121-82-4	2,100		57	140		1
10132	Tetryl	479-45-8	2,100		70	140		1
10132	1,3,5-Trinitrobenzene	99-35-4	2,500		46	140		1
10132	2,4,6-Trinitrotoluene	118-96-7	2,600		46	140		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	9.7		1.4	4.1		1
10401	Dalapon	75-99-0	14		5.0	10		1
10401	2,4-DB	94-82-6	5.9		0.71	1.9		1
10401	Dicamba	1918-00-9	0.82	J	0.46	1.4		1
10401	Dinoseb	88-85-7	1.4	J	0.92	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	9.6		0.92	1.9		1
10401	MCPA	94-74-6	850		87	290		1
10401	MCPP (Mecoprop)	93-65-2	670		86	290		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4,5-T	93-76-5	0.67		0.094	0.20		1
10401	2,4,5-TP	93-72-1	0.72		0.086	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

HPLC Organics	**SW-846 8315A**		ug/kg		ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	5,600		690	1,700		1
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.15	J	0.076	0.20		1
01363	Alpha BHC	319-84-6	0.22		0.039	0.20		1
01363	Beta BHC	319-85-7	0.17	J	0.069	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.24		0.039	0.20		1
01363	Chlordane	57-74-9	0.92	U	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.39		0.076	0.39		1
01363	p,p-DDE	72-55-9	0.46		0.076	0.39		1
01363	p,p-DDT	50-29-3	1.2		0.076	0.39		1
01363	Delta BHC	319-86-8	0.18	J	0.041	0.20		1
01363	Dieldrin	60-57-1	0.57		0.076	0.39		1
01363	Endosulfan I	959-98-8	0.14	J	0.051	0.20		1
01363	Endosulfan II	33213-65-9	0.23	J	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.42		0.076	0.39		1
01363	Endrin	72-20-8	0.37	J	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.30	J	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.25	J	0.076	0.39		1
01363	Heptachlor	76-44-8	0.26		0.069	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.16	J	0.039	0.20		1
01363	Methoxychlor	72-43-5	2.9		0.39	1.9		1
01363	Mirex	2385-85-5	0.076	U	0.076	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	2.2	J	1.1	3.8		1
10225	PCB-1016	12674-11-2	17		0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1242	53469-21-9	0.38	U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9		1
10225	PCB-1260	11096-82-5	19		0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	4.6	U	4.6	14		10
10199	EFH (C15-C20)	n.a.	7.0	J	4.6	14		10
10199	EFH (C21-C30)	n.a.	55		4.6	14		10
10199	EFH (C30 - C40)	n.a.	240		4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6	U	4.6	14		10
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	1,900		110	570		1
10501	Isopropanol	67-63-0	2,000		110	570		1
10501	Methanol	67-56-1	2,000		110	570		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	96		5.7	11		1
08283	Ethylene glycol	107-21-1	160		5.7	11		1
08283	Propylene glycol	57-55-6	160		5.7	11		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.6	J	1.5	4.0		1
10318	o-Terphenyl	84-15-1	1.9	J	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.8	J	1.7	4.0		1
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	33,500		5.55	22.1		1
07914	Boron	7440-42-8	220		0.983	5.52		1
01650	Calcium	7440-70-2	8,290		6.77	22.1		1
01654	Iron	7439-89-6	32,800		10.4	44.2		2
01656	Lithium	7439-93-2	137		0.24	2.2		1
01657	Magnesium	7439-95-4	7,140		2.80	11.0		1
06958	Manganese	7439-96-5	527		0.0861	0.552		1
10145	Phosphorus	7723-14-0	498		0.618	11.0		1
01662	Potassium	7440-09-7	6,180		19.9	55.2		1
01667	Sodium	7440-23-5	1,230		41.2	110		1
07968	Strontium	7440-24-6	144		0.0684	0.552		1
06969	Tin	7440-31-5	390		1.10	11.0		1
06970	Titanium	7440-32-6	1,900		0.420	1.10		1
10146	Zirconium	7440-67-7	111		0.927	5.52		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	1.31	0.0675	0.225		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	10.2	0.0900	0.450		2
06126	Barium	7440-39-3	202	0.122	0.450		2
06127	Beryllium	7440-41-7	1.88	0.0180	0.113		2
06128	Cadmium	7440-43-9	1.88	0.0450	0.113		2
06131	Chromium	7440-47-3	41.3	0.135	0.450		2
06132	Cobalt	7440-48-4	64.0	0.0225	0.113		2
06133	Copper	7440-50-8	34.2	0.0743	0.450		2
06135	Lead	7439-92-1	24.1	0.0117	0.225		2
06138	Molybdenum	7439-98-7	15.2	0.0563	0.113		2
06139	Nickel	7440-02-0	46.7	0.113	0.450		2
06141	Selenium	7782-49-2	2.69	0.0450	0.450		2
06142	Silver	7440-22-4	14.3	0.0135	0.113		2
06145	Thallium	7440-28-0	0.974	0.0338	0.113		2
06148	Vanadium	7440-62-2	105	0.0248	0.113		2
06149	Zinc	7440-66-6	199	0.630	3.38		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.231	0.0031	0.108		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.9	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	12.0	0.92	1.7		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	681	10.3	34.4		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	45.7	1.1	5.7		5
	SW-846 9012B		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	5.9	0.20	0.55		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 21:49	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 06:03	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 16:30	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 04:33	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 20:36	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 09:19	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 09:10	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:55	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 19:48	Heather E Williams	10
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:43	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:53	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 18:37	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:17	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:07	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:08	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:08	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:07	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:07	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:48	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 22:35	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 22:35	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 20:44	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 17:19	Elyse P Brunstetter	5
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:43	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg		ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	231		19.1	38.3		1
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900		19	190		1
04688	Acenaphthylene	208-96-8	1,900		19	190		1
04688	Aniline	62-53-3	1,400		190	570		1
04688	Anthracene	120-12-7	1,900		19	190		1
04688	Benzidine	92-87-5	2,800	J	1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,900		19	190		1
04688	Benzo(a)pyrene	50-32-8	1,900		19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,900		19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,900		19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,800		19	190		1
04688	Benzoic acid	65-85-0	1,200		190	570		1
04688	Benzyl alcohol	100-51-6	2,200		190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	1,700		19	190		1
04688	Butylbenzylphthalate	85-68-7	2,100		19	190		1
04688	Di-n-butylphthalate	84-74-2	1,800		19	190		1
04688	Carbazole	86-74-8	1,900		19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	2,100		38	190		1
04688	4-Chloroaniline	106-47-8	1,600		76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,700		19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,800		19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,800		19	190		1
04688	2-Chloronaphthalene	91-58-7	1,600		19	190		1
04688	2-Chlorophenol	95-57-8	2,000		19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900		38	190		1
04688	Chrysene	218-01-9	1,900		19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,900		19	190		1
04688	Dibenzofuran	132-64-9	1,900		19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,700		19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,600		19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,700		19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,500		110	380		1
04688	2,4-Dichlorophenol	120-83-2	2,000		19	190		1
04688	Diethylphthalate	84-66-2	1,900		19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,800		38	190		1
04688	3,5-Dimethylphenol	108-68-9	2,000		38	190		1
04688	Dimethylphthalate	131-11-3	1,900		19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,300		190	570		1
04688	2,4-Dinitrophenol	51-28-5	2,000		380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	2,100		38	190		1
04688	2,6-Dinitrotoluene	606-20-2	2,000		19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	1,800		19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000		19	380		1
04688	Fluoranthene	206-44-0	1,800		19	190		1
04688	Fluorene	86-73-7	2,000		19	190		1
04688	Hexachlorobenzene	118-74-1	1,800		19	190		1
04688	Hexachlorobutadiene	87-68-3	1,500		76	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorocyclopentadiene	77-47-4	2,700	190	570		1
04688	Hexachloroethane	67-72-1	1,500	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	2,000	19	190		1
04688	Isophorone	78-59-1	1,800	19	190		1
04688	1-Methylnaphthalene	90-12-0	1,900	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,800	19	190		1
04688	2-Methylphenol	95-48-7	2,000	38	190		1
04688	4-Methylphenol	106-44-5	2,100	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,700	19	190		1
04688	2-Nitroaniline	88-74-4	2,100	19	190		1
04688	3-Nitroaniline	99-09-2	2,100	38	190		1
04688	4-Nitroaniline	100-01-6	1,700	76	190		1
04688	Nitrobenzene	98-95-3	1,700	19	190		1
04688	2-Nitrophenol	88-75-5	1,900	19	190		1
04688	4-Nitrophenol	100-02-7	1,700	190	570		1
04688	N-Nitrosodimethylamine	62-75-9	1,700	38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	2,000	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,900	19	190		1
04688	Pentachlorophenol	87-86-5	1,600	190	570		1
04688	Phenanthrene	85-01-8	1,800	19	190		1
04688	Phenol	108-95-2	2,100	19	190		1
04688	Pyrene	129-00-0	2,000	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,700	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	2,000	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	2,000	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene						
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	37	0.76	1.9		1
10138	Acenaphthylene	208-96-8	36	0.38	1.9		1
10138	Anthracene	120-12-7	39	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	38	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	48	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	54	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	28	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	50	0.76	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Butylbenzylphthalate	85-68-7	42		6.9	21		1
10138	Di-n-butylphthalate	84-74-2	45		6.9	21		1
10138	Chrysene	218-01-9	39		0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	33		0.76	1.9		1
10138	Diethylphthalate	84-66-2	39		6.9	21		1
10138	Dimethylphthalate	131-11-3	38		6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	39		6.9	21		1
10138	Fluoranthene	206-44-0	45		0.76	1.9		1
10138	Fluorene	86-73-7	39		0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	32		0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	36		0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	32		0.76	1.9		1
10138	Naphthalene	91-20-3	34		0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	37		0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	54		6.9	21		1
10138	Phenanthrene	85-01-8	40		0.76	1.9		1
10138	Pyrene	129-00-0	36		0.76	1.9		1
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	2,500		69	140		1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	2,500		46	140		1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	92	U	92	280		1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	92	U	92	280		1
10132	1,3-Dinitrobenzene	99-65-0	2,600		46	140		1
10132	2,4-Dinitrotoluene	121-14-2	2,500		46	140		1
10132	2,6-Dinitrotoluene	606-20-2	2,500		46	140		1
10132	HMX	2691-41-0	2,200		110	340		1
10132	Nitrobenzene	98-95-3	2,600		46	140		1
10132	Nitroglycerin	55-63-0	55,000		920	2,800		1
10132	2-Nitrotoluene	88-72-2	2,400		92	140		1
10132	3-Nitrotoluene	99-08-1	2,600		110	140		1
10132	4-Nitrotoluene	99-99-0	2,400		92	140		1
10132	PETN	78-11-5	67,000		920	2,800		1
10132	RDX	121-82-4	2,100		57	140		1
10132	Tetryl	479-45-8	1,800		70	140		1
10132	1,3,5-Trinitrobenzene	99-35-4	2,400		46	140		1
10132	2,4,6-Trinitrotoluene	118-96-7	2,500		46	140		1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	8.9		1.4	4.1		1
10401	Dalapon	75-99-0	11		5.0	10		1
10401	2,4-DB	94-82-6	6.4		0.71	1.9		1
10401	Dicamba	1918-00-9	0.69	J	0.46	1.4		1
10401	Dinoseb	88-85-7	1.1	J	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	8.3		0.91	1.9		1
10401	MCPA	94-74-6	710		87	290		1
10401	MCPP (Mecoprop)	93-65-2	740		86	290		1
10401	2,4,5-T	93-76-5	0.56		0.093	0.20		1
10401	2,4,5-TP	93-72-1	0.64		0.086	0.20		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
HPLC Organics	**SW-846 8315A**		ug/kg		ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	5,600		690	1,700		1
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.17	J	0.076	0.20		1
01363	Alpha BHC	319-84-6	0.23		0.039	0.20		1
01363	Beta BHC	319-85-7	0.20		0.069	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.24		0.039	0.20		1
01363	Chlordane	57-74-9	0.92	U	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.42		0.076	0.39		1
01363	p,p-DDE	72-55-9	0.37	J	0.076	0.39		1
01363	p,p-DDT	50-29-3	1.5		0.076	0.39		1
01363	Delta BHC	319-86-8	0.20		0.041	0.20		1
01363	Dieldrin	60-57-1	0.46		0.076	0.39		1
01363	Endosulfan I	959-98-8	0.16	J	0.051	0.20		1
01363	Endosulfan II	33213-65-9	0.39		0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.42		0.076	0.39		1
01363	Endrin	72-20-8	0.41		0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.25	J	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.32	J	0.076	0.39		1
01363	Heptachlor	76-44-8	0.29		0.069	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.20		0.039	0.20		1
01363	Methoxychlor	72-43-5	3.8		0.39	1.9		1
01363	Mirex	2385-85-5	0.076	U	0.076	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.5		1
	The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
	The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.							
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	4.0		1.1	3.8		1
10225	PCB-1016	12674-11-2	21		0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	1.9		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9		1
10225	PCB-1260	11096-82-5	21		0.45	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	4.6	U	4.6	14		10
10199	EFH (C15-C20)	n.a.	8.1	J	4.6	14		10
10199	EFH (C21-C30)	n.a.	110		4.6	14		10
10199	EFH (C30 - C40)	n.a.	400		4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6	U	4.6	14		10
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	1,800		110	570		1
10501	Isopropanol	67-63-0	2,000		110	570		1
10501	Methanol	67-56-1	2,000		110	570		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	93		5.7	11		1
08283	Ethylene glycol	107-21-1	150		5.7	11		1
08283	Propylene glycol	57-55-6	160		5.7	11		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.5	J	1.5	4.0		1
10318	o-Terphenyl	84-15-1	1.8	J	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.8	J	1.7	4.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	35,600		5.66	22.5		1
07914	Boron	7440-42-8	225		1.00	5.63		1
01650	Calcium	7440-70-2	9,590		6.90	22.5		1
01654	Iron	7439-89-6	31,600		10.6	45.0		2
01656	Lithium	7439-93-2	143		0.25	2.3		1
01657	Magnesium	7439-95-4	7,350		2.86	11.3		1
06958	Manganese	7439-96-5	468		0.0878	0.563		1
10145	Phosphorus	7723-14-0	458		0.630	11.3		1
01662	Potassium	7440-09-7	6,140		20.3	56.3		1
01667	Sodium	7440-23-5	1,240		42.0	113		1
07968	Strontium	7440-24-6	148		0.0698	0.563		1
06969	Tin	7440-31-5	393		1.13	11.3		1
06970	Titanium	7440-32-6	1,980		0.428	1.13		1
10146	Zirconium	7440-67-7	113		0.945	5.63		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	1.51		0.0675	0.225		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	11.4	0.0900	0.450		2
06126	Barium	7440-39-3	159	0.122	0.450		2
06127	Beryllium	7440-41-7	2.10	0.0180	0.113		2
06128	Cadmium	7440-43-9	2.25	0.0450	0.113		2
06131	Chromium	7440-47-3	39.7	0.135	0.450		2
06132	Cobalt	7440-48-4	64.0	0.0225	0.113		2
06133	Copper	7440-50-8	39.0	0.0743	0.450		2
06135	Lead	7439-92-1	28.4	0.0117	0.225		2
06138	Molybdenum	7439-98-7	17.3	0.0563	0.113		2
06139	Nickel	7440-02-0	45.2	0.113	0.450		2
06141	Selenium	7782-49-2	2.97	0.0450	0.450		2
06142	Silver	7440-22-4	16.4	0.0135	0.113		2
06145	Thallium	7440-28-0	1.17	0.0338	0.113		2
06148	Vanadium	7440-62-2	117	0.0248	0.113		2
06149	Zinc	7440-66-6	178	0.630	3.38		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.216	0.0032	0.112		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 22:07	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 06:30	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 17:02	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 05:15	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 20:46	James H Place	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 09:46	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 09:24	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 09:14	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 20:13	Heather E Williams	10
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:58	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 22:06	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 19:22	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:20	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:10	David K Beck	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:10	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:10	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:10	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/07/2011 00:10	David K Beck	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:52	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296050
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,700		5.72	22.7		1
07914	Boron	7440-42-8	1.87	J	1.01	5.68		1
01650	Calcium	7440-70-2	8,480		6.97	22.7		1
01654	Iron	7439-89-6	31,900		10.7	45.5		2
01656	Lithium	7439-93-2	26.6		0.25	2.3		1
01657	Magnesium	7439-95-4	6,920		2.89	11.4		1
06958	Manganese	7439-96-5	435		0.0887	0.568		1
10145	Phosphorus	7723-14-0	344		0.637	11.4		1
01662	Potassium	7440-09-7	4,400		20.5	56.8		1
01667	Sodium	7440-23-5	140		42.4	114		1
07968	Strontium	7440-24-6	39.3		0.0705	0.568		1
06969	Tin	7440-31-5	3.16	J	1.14	11.4		1
06970	Titanium	7440-32-6	1,620		0.432	1.14		1
10146	Zirconium	7440-67-7	6.80		0.955	5.68		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.296		0.0675	0.225		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.08		0.0900	0.450		2
06126	Barium	7440-39-3	139		0.122	0.450		2
06127	Beryllium	7440-41-7	0.776		0.0180	0.113		2
06128	Cadmium	7440-43-9	0.373		0.0450	0.113		2
06131	Chromium	7440-47-3	28.4		0.135	0.450		2
06132	Cobalt	7440-48-4	9.51		0.0225	0.113		2
06133	Copper	7440-50-8	17.1		0.0743	0.450		2
06135	Lead	7439-92-1	17.2		0.0117	0.225		2
06138	Molybdenum	7439-98-7	1.14		0.0563	0.113		2
06139	Nickel	7440-02-0	20.6		0.113	0.450		2
06141	Selenium	7782-49-2	0.139	J	0.0450	0.450		2
06142	Silver	7440-22-4	0.136		0.0135	0.113		2
06145	Thallium	7440-28-0	0.337		0.0338	0.113		2
06148	Vanadium	7440-62-2	67.4		0.0248	0.113		2
06149	Zinc	7440-66-6	152		0.630	3.38		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0155	J	0.0031	0.108		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.6		0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2	J	0.92	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.4		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.88	J	0.23	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296050
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9012B**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.57		1
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.00	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11626	28a Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:13	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:04	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:06	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:06	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296050
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:04	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:04	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:47	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 22:21	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 22:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 20:22	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 17:53	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:42	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	42.3		19.0	38.1		1
	The surrogate standard n-nitrosodimethylamine-d6 was outside of the advisory QC windows.							
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	75	U	75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	75	U	75	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	1.2	J	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	1.8	J	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	4.8		0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	1.0	J	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.8	U	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	6.8	U	6.8	20		1
10138	Chrysene	218-01-9	1.5	J	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.8	U	6.8	20		1
10138	Dimethylphthalate	131-11-3	6.8	U	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.8	U	6.8	20		1
10138	Fluoranthene	206-44-0	2.1		0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.88	J	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76	U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.8	U	6.8	20		1
10138	Phenanthrene	85-01-8	0.88	J	0.76	1.9		1
10138	Pyrene	129-00-0	1.7	J	0.76	1.9		1
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67	U	67	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U	45	130	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90	U	90	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90	U	90	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	45	U	45	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	45	U	45	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	45	U	45	130	10000000	1
10132	HMX	2691-41-0	110	U	110	340	10000000	1
10132	Nitrobenzene	98-95-3	45	U	45	130	10000000	1
10132	Nitroglycerin	55-63-0	900	U	900	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	90	U	90	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	90	U	90	130	10000000	1
10132	PETN	78-11-5	900	U	900	2,700	10000000	1
10132	RDX	121-82-4	56	U	56	130	10000000	1
10132	Tetryl	479-45-8	68	U	68	130	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	45	U	45	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	45	U	45	130	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.9	J	1.4	4.1		1
10401	Dalapon	75-99-0	5.0	U	5.0	10		1
10401	2,4-DB	94-82-6	0.70	U	0.70	1.9		1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.4		1
10401	Dinoseb	88-85-7	0.91	U	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.91	U	0.91	1.9		1
10401	MCPA	94-74-6	270	J	86	280		1
10401	MCPP (Mecoprop)	93-65-2	85	U	85	280		1
10401	2,4,5-T	93-76-5	0.093	U	0.093	0.19		1
10401	2,4,5-TP	93-72-1	0.085	U	0.085	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	25a Formaldehyde 8315A	50-00-0	680	U	680	1,700		1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.075	U	0.075	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.068	U	0.068	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	4.4		0.91	3.9		1
01363	p,p-DDD	72-54-8	0.075	U	0.075	0.39		1
01363	p,p-DDE	72-55-9	0.19	J	0.075	0.39		1
01363	p,p-DDT	50-29-3	0.48		0.075	0.39		1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.21	J	0.075	0.39		1
01363	Endosulfan I	959-98-8	0.050	U	0.050	0.19		1
01363	Endosulfan II	33213-65-9	0.075	U	0.075	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.075	U	0.075	0.39		1
01363	Endrin	72-20-8	0.075	U	0.075	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.075	U	0.075	0.39		1
01363	Endrin Ketone	53494-70-5	0.075	U	0.075	0.39		1
01363	Heptachlor	76-44-8	0.068	U	0.068	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.086	J	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.075	U	0.075	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.5		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Heptachlor epoxide, DDE, and dieldrin are not detected in the reextract. Endosulfan II is detected at .08 ug/kg and mirex is detected at .19 ug/kg in the reextract.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.6	J	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	1.9		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9		1
10225	PCB-1260	11096-82-5	1.6	J	0.44	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.46	U	0.46	1.4		1
10199	EFH (C15-C20)	n.a.	5.1		0.46	1.4		1
10199	EFH (C21-C30)	n.a.	11		0.46	1.4		1
10199	EFH (C30 - C40)	n.a.	40		0.46	1.4		1
10199	EFH (C8-C11)	n.a.	0.46	U	0.46	1.4		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	570		1
10501	Isopropanol	67-63-0	110	U	110	570		1
10501	Methanol	67-56-1	110	U	110	570		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.7	U	5.7	11		1
08283	Ethylene glycol	107-21-1	5.7	U	5.7	11		1
08283	Propylene glycol	57-55-6	5.7	U	5.7	11		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,300		5.52	22.0		1
07914	Boron	7440-42-8	2.70	J	0.977	5.49		1
01650	Calcium	7440-70-2	49,000		6.73	22.0		1
01654	Iron	7439-89-6	32,100		10.3	43.9		2
01656	Lithium	7439-93-2	28.7		0.24	2.2		1
01657	Magnesium	7439-95-4	7,310		2.79	11.0		1
06958	Manganese	7439-96-5	448		0.0856	0.549		1
10145	Phosphorus	7723-14-0	316		0.615	11.0		1
01662	Potassium	7440-09-7	4,250		19.8	54.9		1
01667	Sodium	7440-23-5	135		40.9	110		1
07968	Strontium	7440-24-6	51.8		0.0681	0.549		1
06969	Tin	7440-31-5	2.79	J	1.10	11.0		1
06970	Titanium	7440-32-6	1,570		0.417	1.10		1
10146	Zirconium	7440-67-7	7.12		0.922	5.49		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.353		0.0672	0.224		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.86		0.0895	0.448		2
06126	Barium	7440-39-3	183		0.121	0.448		2
06127	Beryllium	7440-41-7	1.01		0.0179	0.112		2
06128	Cadmium	7440-43-9	0.329		0.0448	0.112		2
06131	Chromium	7440-47-3	33.1		0.134	0.448		2
06132	Cobalt	7440-48-4	10.1		0.0224	0.112		2
06133	Copper	7440-50-8	20.1		0.0739	0.448		2
06135	Lead	7439-92-1	12.8		0.0116	0.224		2
06138	Molybdenum	7439-98-7	0.562		0.0560	0.112		2
06139	Nickel	7440-02-0	26.3		0.112	0.448		2
06141	Selenium	7782-49-2	0.0791	J	0.0448	0.448		2
06142	Silver	7440-22-4	0.0701	J	0.0134	0.112		2
06145	Thallium	7440-28-0	0.463		0.0336	0.112		2
06148	Vanadium	7440-62-2	87.2		0.0246	0.112		2
06149	Zinc	7440-66-6	86.5		0.627	3.36		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032	U	0.0032	0.112		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.4		0.91	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.1	J	0.91	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.2		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	1.1	J	0.23	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.57		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	7.99		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	12.4		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 17:30	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 17:24	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 16:46	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 05:58	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 21:05	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 12:32	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 11:13	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 09:32	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 17:43	Heather E Williams	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 23:43	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 22:44	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 14:06	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:48	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:38	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:33	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:33	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:38	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:38	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:53	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 23:32	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 23:32	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 21:50	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 18:16	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201B	05/31/2011 19:45	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201B	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402B	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	580		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,900		1
04688	Benzoic acid	65-85-0	190	U	190	580		1
04688	Benzyl alcohol	100-51-6	190	U	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580		1
04688	2,4-Dinitrophenol	51-28-5	390	U	390	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	390		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	39	U	39	190		1
04688	4-Methylphenol	106-44-5	39	U	39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	39	U	39	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	580		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.8	U	3.8	9.6		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.6		5
10138	Anthracene	120-12-7	1.9	U	1.9	9.6		5
10138	Benzo(a)anthracene	56-55-3	3.8	U	3.8	9.6		5
10138	Benzo(a)pyrene	50-32-8	3.8	U	3.8	9.6		5
10138	Benzo(b)fluoranthene	205-99-2	13		3.8	9.6		5
10138	Benzo(g,h,i)perylene	191-24-2	3.8	U	3.8	9.6		5
10138	Benzo(k)fluoranthene	207-08-9	3.8	U	3.8	9.6		5
10138	Chrysene	218-01-9	6.8	J	1.9	9.6		5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U	3.8	9.6		5
10138	Fluoranthene	206-44-0	10		3.8	9.6		5
10138	Fluorene	86-73-7	3.8	U	3.8	9.6		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U	3.8	9.6		5
10138	1-Methylnaphthalene	90-12-0	3.8	U	3.8	9.6		5
10138	2-Methylnaphthalene	91-57-6	3.8	U	3.8	9.6		5
10138	Naphthalene	91-20-3	3.8	U	3.8	9.6		5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U	3.8	9.6		5
10138	Phenanthrene	85-01-8	4.8	J	3.8	9.6		5
10138	Pyrene	129-00-0	6.1	J	3.8	9.6		5
	Reporting limits were raised due to interference from the sample matrix.							
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.7	J	1.4	4.2		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	0.72	U	0.72	2.0		1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.92	U	0.92	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U	0.92	2.0		1
10401	MCPA	94-74-6	230	J	88	290		1
10401	MCPP (Mecoprop)	93-65-2	87	U	87	290		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4,5-T	93-76-5	0.095	U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.22		0.087	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069	U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	1.2	J	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.076	U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.14	J	0.076	0.39		1
01363	p,p-DDT	50-29-3	0.28	J	0.076	0.39		1
01363	Delta BHC	319-86-8	0.042	U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.076	U	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076	U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076	U	0.076	0.39		1
01363	Endrin	72-20-8	0.076	U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.17	J	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069	U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039	U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.095	U	0.095	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. the original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate recoveries are low for the reextract. DDE, DDT, endrin aldehyde and chlordane are not detected in the reextract.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	3.4	J	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	2.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1232	11141-16-5	0.38	U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0		1
10225	PCB-1260	11096-82-5	1.4	J	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	34,200		5.65	22.4		1
07914	Boron	7440-42-8	2.42	J	0.999	5.61		1
01650	Calcium	7440-70-2	7,210		6.88	22.4		1
01654	Iron	7439-89-6	33,900		10.6	44.9		2
01656	Lithium	7439-93-2	28.1		0.25	2.2		1
01657	Magnesium	7439-95-4	7,510		2.85	11.2		1
06958	Manganese	7439-96-5	466		0.0875	0.561		1
10145	Phosphorus	7723-14-0	335		0.629	11.2		1
01662	Potassium	7440-09-7	5,180		20.2	56.1		1
01667	Sodium	7440-23-5	138		41.9	112		1
07968	Strontium	7440-24-6	41.5		0.0696	0.561		1
06969	Tin	7440-31-5	3.06	J	1.12	11.2		1
06970	Titanium	7440-32-6	1,660		0.427	1.12		1
10146	Zirconium	7440-67-7	7.02		0.943	5.61		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.386		0.0673	0.224		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.16		0.0898	0.449		2
06126	Barium	7440-39-3	133		0.121	0.449		2
06127	Beryllium	7440-41-7	1.09		0.0180	0.112		2
06128	Cadmium	7440-43-9	0.491		0.0449	0.112		2
06131	Chromium	7440-47-3	30.3		0.135	0.449		2
06132	Cobalt	7440-48-4	9.27		0.0224	0.112		2
06133	Copper	7440-50-8	23.4		0.0741	0.449		2
06135	Lead	7439-92-1	16.6		0.0117	0.224		2
06138	Molybdenum	7439-98-7	0.649		0.0561	0.112		2
06139	Nickel	7440-02-0	29.8		0.112	0.449		2
06141	Selenium	7782-49-2	0.216	J	0.0449	0.449		2
06142	Silver	7440-22-4	0.0774	J	0.0135	0.112		2
06145	Thallium	7440-28-0	0.506		0.0337	0.112		2
06148	Vanadium	7440-62-2	97.1		0.0247	0.112		2
06149	Zinc	7440-66-6	140		0.629	3.37		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0038	J	0.0031	0.110		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.9		0.92	1.2		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4	U	10.4	34.7		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.53	J	0.23	1.2		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	7.74		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	13.5		0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 17:51	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 17:59	Gregory J Drahovsky	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 13:55	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 11:40	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 09:51	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 09:05	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:55	David K Beck	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:55	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:55	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:10	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:02	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 23:46	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 22:12	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 18:22	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-052-SA5DN-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	560		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U	190	560		1
04688	Benzyl alcohol	100-51-6	190	U	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190		1
04688	4-Chloroaniline	106-47-8	74	U	74	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560		1
04688	2,4-Dinitrophenol	51-28-5	370	U	370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	370		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	74	U	74	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	37	U	37	190		1
04688	4-Methylphenol	106-44-5	37	U	37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	37	U	37	190		1
04688	4-Nitroaniline	100-01-6	74	U	74	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	560		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.7	U	3.7	9.2		5
10138	Acenaphthylene	208-96-8	1.8	U	1.8	9.2		5
10138	Anthracene	120-12-7	2.2	J	1.8	9.2		5
10138	Benzo(a)anthracene	56-55-3	5.9	J	3.7	9.2		5
10138	Benzo(a)pyrene	50-32-8	9.2	J	3.7	9.2		5
10138	Benzo(b)fluoranthene	205-99-2	34		3.7	9.2		5
10138	Benzo(g,h,i)perylene	191-24-2	6.3	J	3.7	9.2		5
10138	Benzo(k)fluoranthene	207-08-9	3.7	U	3.7	9.2		5
10138	Chrysene	218-01-9	15		1.8	9.2		5
10138	Dibenz(a,h)anthracene	53-70-3	3.7	U	3.7	9.2		5
10138	Fluoranthene	206-44-0	30		3.7	9.2		5
10138	Fluorene	86-73-7	3.7	U	3.7	9.2		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	4.5	J	3.7	9.2		5
10138	1-Methylnaphthalene	90-12-0	3.7	U	3.7	9.2		5
10138	2-Methylnaphthalene	91-57-6	3.7	U	3.7	9.2		5
10138	Naphthalene	91-20-3	3.7	U	3.7	9.2		5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U	3.7	9.2		5
10138	Phenanthrene	85-01-8	18		3.7	9.2		5
10138	Pyrene	129-00-0	19		3.7	9.2		5
	Reporting limits were raised due to interference from the sample matrix.							
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0		1
10401	Dalapon	75-99-0	4.9	U	4.9	10		1
10401	2,4-DB	94-82-6	0.70	U	0.70	1.9		1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.3		1
10401	Dinoseb	88-85-7	0.90	U	0.90	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U	0.90	1.9		1
10401	MCPA	94-74-6	85	U	85	280		1
10401	MCPP (Mecoprop)	93-65-2	84	U	84	280		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4,5-T	93-76-5	0.092	U	0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.12	J	0.084	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.074	U	0.074	0.19		1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.19		1
01363	Beta BHC	319-85-7	0.067	U	0.067	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.038	U	0.038	0.19		1
01363	Chlordane	57-74-9	1.5	U	1.5	3.8		1
01363	p,p-DDD	72-54-8	0.074	U	0.074	0.38		1
01363	p,p-DDE	72-55-9	0.10	U	0.10	0.38		1
01363	p,p-DDT	50-29-3	0.95		0.074	0.38		1
01363	Delta BHC	319-86-8	0.040	U	0.040	0.19		1
01363	Dieldrin	60-57-1	0.15	U	0.15	0.38		1
01363	Endosulfan I	959-98-8	0.049	U	0.049	0.19		1
01363	Endosulfan II	33213-65-9	0.089	U	0.089	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.074	U	0.074	0.38		1
01363	Endrin	72-20-8	0.074	U	0.074	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.074	U	0.074	0.38		1
01363	Endrin Ketone	53494-70-5	0.074	U	0.074	0.38		1
01363	Heptachlor	76-44-8	0.067	U	0.067	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.038	U	0.038	0.19		1
01363	Methoxychlor	72-43-5	0.38	U	0.38	1.9		1
01363	Mirex	2385-85-5	0.12	U	0.12	0.38		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.4		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. Similar results are observed for both. The original data is reported.

The surrogate recovery for the reextract is low.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.37	U	0.37	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1232	11141-16-5	0.37	U	0.37	1.9		1
10225	PCB-1242	53469-21-9	0.37	U	0.37	1.9		1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37	U	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.44	U	0.44	1.9		1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,200		5.60	22.2		1
07914	Boron	7440-42-8	0.990	U	0.990	5.56		1
01650	Calcium	7440-70-2	9,360		6.82	22.2		1
01654	Iron	7439-89-6	29,800		5.24	22.2		1
01656	Lithium	7439-93-2	19.4		0.24	2.2		1
01657	Magnesium	7439-95-4	5,310		2.83	11.1		1
06958	Manganese	7439-96-5	538		0.0868	0.556		1
10145	Phosphorus	7723-14-0	445		0.623	11.1		1
01662	Potassium	7440-09-7	4,050		20.0	55.6		1
01667	Sodium	7440-23-5	129		41.5	111		1
07968	Strontium	7440-24-6	37.8		0.0690	0.556		1
06969	Tin	7440-31-5	2.88	J	1.11	11.1		1
06970	Titanium	7440-32-6	1,450		0.423	1.11		1
10146	Zirconium	7440-67-7	5.62		0.934	5.56		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.351		0.0655	0.218		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.65		0.0873	0.436		2
06126	Barium	7440-39-3	187		0.118	0.436		2
06127	Beryllium	7440-41-7	0.913		0.0175	0.109		2
06128	Cadmium	7440-43-9	0.461		0.0436	0.109		2
06131	Chromium	7440-47-3	26.4		0.131	0.436		2
06132	Cobalt	7440-48-4	10.6		0.0218	0.109		2
06133	Copper	7440-50-8	20.4		0.0720	0.436		2
06135	Lead	7439-92-1	16.9		0.0113	0.218		2
06138	Molybdenum	7439-98-7	0.907		0.0545	0.109		2
06139	Nickel	7440-02-0	24.7		0.109	0.436		2
06141	Selenium	7782-49-2	0.155	J	0.0436	0.436		2
06142	Silver	7440-22-4	0.0515	J	0.0131	0.109		2
06145	Thallium	7440-28-0	0.425		0.0327	0.109		2
06148	Vanadium	7440-62-2	82.1		0.0240	0.109		2
06149	Zinc	7440-66-6	108		0.611	3.27		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0043	J	0.0032	0.112		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.7		0.90	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1	U	10.1	33.7		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.43	J	0.22	1.1		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	7.78		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	11.0		0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 18:17	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 18:30	Gregory J Drahovsky	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 14:22	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 12:07	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 10:09	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:58	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:58	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:13	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:05	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	06/01/2011 00:00	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 22:34	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 18:33	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg		ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	19.2	U	19.2	38.4		1
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	580		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	580		1
04688	Benzyl alcohol	100-51-6	190	U	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580		1
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	380		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	580		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.8	U	3.8	9.5		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.5		5
10138	Anthracene	120-12-7	1.9	U	1.9	9.5		5
10138	Benzo(a)anthracene	56-55-3	3.8	U	3.8	9.5		5
10138	Benzo(a)pyrene	50-32-8	5.7	J	3.8	9.5		5
10138	Benzo(b)fluoranthene	205-99-2	5.1	J	3.8	9.5		5
10138	Benzo(g,h,i)perylene	191-24-2	4.1	J	3.8	9.5		5
10138	Benzo(k)fluoranthene	207-08-9	11		3.8	9.5		5
10138	Chrysene	218-01-9	6.9	J	1.9	9.5		5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U	3.8	9.5		5
10138	Fluoranthene	206-44-0	16		3.8	9.5		5
10138	Fluorene	86-73-7	3.8	U	3.8	9.5		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U	3.8	9.5		5
10138	1-Methylnaphthalene	90-12-0	3.8	U	3.8	9.5		5
10138	2-Methylnaphthalene	91-57-6	3.8	U	3.8	9.5		5
10138	Naphthalene	91-20-3	3.8	U	3.8	9.5		5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U	3.8	9.5		5
10138	Phenanthrene	85-01-8	11		3.8	9.5		5
10138	Pyrene	129-00-0	11		3.8	9.5		5
	Reporting limits were raised due to interference from the sample matrix.							
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	68	U	68	140	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U	45	140	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90	U	90	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90	U	90	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	45	U	45	140	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	45	U	45	140	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	45	U	45	140	10000000	1
10132	HMX	2691-41-0	110	U	110	340	10000000	1
10132	Nitrobenzene	98-95-3	45	U	45	140	10000000	1
10132	Nitroglycerin	55-63-0	900	U	900	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	90	U	90	140	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	140	10000000	1
10132	4-Nitrotoluene	99-99-0	90	U	90	140	10000000	1
10132	PETN	78-11-5	900	U	900	2,700	10000000	1
10132	RDX	121-82-4	56	U	56	140	10000000	1
10132	Tetryl	479-45-8	69	U	69	140	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	45	U	45	140	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	45	U	45	140	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	0.71	U	0.71	2.0		1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.92	U	0.92	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U	0.92	2.0		1
10401	MCPA	94-74-6	99	U	99	290		1
10401	MCPP (Mecoprop)	93-65-2	86	U	86	290		1
10401	2,4,5-T	93-76-5	0.094	U	0.094	0.20		1
10401	2,4,5-TP	93-72-1	0.16	J	0.086	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite florisil cleanup, our usual reporting limits were not attained.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	25a Formaldehyde 8315A	50-00-0	690	U	690	1,700		1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.4	U	2.4	5.8		1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069	U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	2.6	U	2.6	3.9		1
01363	p,p-DDD	72-54-8	0.076	U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.13	U	0.13	0.39		1
01363	p,p-DDT	50-29-3	0.65		0.076	0.39		1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.097	U	0.097	0.39		1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076	U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076	U	0.076	0.39		1
01363	Endrin	72-20-8	0.076	U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.076	U	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069	U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039	U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.13	U	0.13	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. Similar results are observed for both. The original data is reported.

The surrogate recovery for the reextractr is low.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.9	J	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1242	53469-21-9	0.38	U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9		1
10225	PCB-1260	11096-82-5	2.3		0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	5.6	J	4.6	14		10
10199	EFH (C15-C20)	n.a.	30		4.6	14		10
10199	EFH (C21-C30)	n.a.	81		4.6	14		10
10199	EFH (C30 - C40)	n.a.	250		4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6	U	4.6	14		10
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	120	U	120	580		1
10501	Isopropanol	67-63-0	120	U	120	580		1
10501	Methanol	67-56-1	120	U	120	580		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.8	U	5.8	12		1
08283	Ethylene glycol	107-21-1	5.8	U	5.8	12		1
08283	Propylene glycol	57-55-6	5.8	U	5.8	12		1
Terphenyls	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,900		5.79	23.0		1
07914	Boron	7440-42-8	2.14	J	1.02	5.75		1
01650	Calcium	7440-70-2	9,310		7.05	23.0		1
01654	Iron	7439-89-6	31,500		10.8	46.0		2
01656	Lithium	7439-93-2	26.0		0.25	2.3		1
01657	Magnesium	7439-95-4	6,720		2.92	11.5		1
06958	Manganese	7439-96-5	427		0.0898	0.575		1
10145	Phosphorus	7723-14-0	333		0.644	11.5		1
01662	Potassium	7440-09-7	4,320		20.7	57.5		1
01667	Sodium	7440-23-5	139		42.9	115		1
07968	Strontium	7440-24-6	38.0		0.0713	0.575		1
06969	Tin	7440-31-5	3.12	J	1.15	11.5		1
06970	Titanium	7440-32-6	1,590		0.437	1.15		1
10146	Zirconium	7440-67-7	6.81		0.967	5.75		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.457		0.0684	0.228		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.68		0.0911	0.456		2
06126	Barium	7440-39-3	145		0.308	1.14		5
06127	Beryllium	7440-41-7	1.07		0.0182	0.114		2
06128	Cadmium	7440-43-9	0.573		0.0456	0.114		2
06131	Chromium	7440-47-3	29.7		0.137	0.456		2
06132	Cobalt	7440-48-4	9.39		0.0228	0.114		2
06133	Copper	7440-50-8	25.7		0.0752	0.456		2
06135	Lead	7439-92-1	22.5		0.0118	0.228		2
06138	Molybdenum	7439-98-7	1.32		0.0570	0.114		2
06139	Nickel	7440-02-0	30.8		0.114	0.456		2
06141	Selenium	7782-49-2	0.210	J	0.0456	0.456		2
06142	Silver	7440-22-4	0.0939	J	0.0137	0.114		2
06145	Thallium	7440-28-0	0.494		0.0342	0.114		2
06148	Vanadium	7440-62-2	102		0.0251	0.114		2
06149	Zinc	7440-66-6	195		1.60	8.55		5
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0303	J	0.0031	0.109		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.7		0.92	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2	J	0.92	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4	U	10.4	34.5		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	1.0	J	0.23	1.2		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.56		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.05		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	13.1		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 17:48	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 18:44	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/09/2011 15:14	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 06:40	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	2	111520004A	06/03/2011 21:14	James H Place	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 14:50	Michele D Hamilton	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 22:17	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 12:34	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 10:28	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	2	111520004A	06/01/2011 13:30	Kelli M Barto	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 20:38	Heather E Williams	10
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 23:58	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 22:57	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 22:22	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:52	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:19	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:35	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:35	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:41	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:41	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:19	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:54	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	06/01/2011 00:14	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	06/01/2011 00:14	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 22:56	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 18:50	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:44	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402B	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			**ng/l**		**ng/l**	**ng/l**	**ng/l**	
10962	N-Nitrosodimethylamine	62-75-9	2.07		0.493	0.985		1
GC/MS Semivolatiles SW-846 8270C			**ug/l**		**ug/l**	**ug/l**	**ug/l**	
04678	Aniline	62-53-3	1	U	1	5		1
04678	Benzidine	92-87-5	20	U	20	59		1
04678	Benzoic acid	65-85-0	6	U	6	15		1
04678	Benzyl alcohol	100-51-6	5	U	5	15		1
04678	4-Bromophenyl-phenylether	101-55-3	1	U	1	5		1
04678	Carbazole	86-74-8	1	U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1	U	1	5		1
04678	4-Chloroaniline	106-47-8	1	U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1	U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2	U	2	5		1
04678	2-Chlorophenol	95-57-8	1	U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2	U	2	5		1
04678	Dibenzofuran	132-64-9	1	U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1	U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3	U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3	U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	15		1
04678	2,4-Dinitrophenol	51-28-5	10	U	10	29		1
04678	2,4-Dinitrotoluene	121-14-2	1	U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1	U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1	U	1	5		1
04678	Hexachlorobenzene	118-74-1	1	U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1	U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5	U	5	15		1
04678	Hexachloroethane	67-72-1	1	U	1	5		1
04678	Isophorone	78-59-1	1	U	1	5		1
04678	2-Methylphenol	95-48-7	1	U	1	5		1
04678	4-Methylphenol	106-44-5	2	U	2	5		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1	U	1	5		1
04678	3-Nitroaniline	99-09-2	1	U	1	5		1
04678	4-Nitroaniline	100-01-6	1	U	1	5		1
04678	Nitrobenzene	98-95-3	1	U	1	5		1
04678	2-Nitrophenol	88-75-5	1	U	1	5		1
04678	4-Nitrophenol	100-02-7	10	U	10	29		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2	U	2	5		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04678	Pentachlorophenol	87-86-5	3	U	3	15		1
04678	Phenol	108-95-2	1	U	1	5		1
04678	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1	U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1	U	1	5		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10137	Acenaphthene	83-32-9	0.0098	U	0.0098	0.049		1
10137	Acenaphthylene	208-96-8	0.0098	U	0.0098	0.049		1
10137	Anthracene	120-12-7	0.0098	U	0.0098	0.049		1
10137	Benzo(a)anthracene	56-55-3	0.0098	U	0.0098	0.049		1
10137	Benzo(a)pyrene	50-32-8	0.0098	U	0.0098	0.049		1
10137	Benzo(b)fluoranthene	205-99-2	0.0098	U	0.0098	0.049		1
10137	Benzo(g,h,i)perylene	191-24-2	0.0098	U	0.0098	0.049		1
10137	Benzo(k)fluoranthene	207-08-9	0.0098	U	0.0098	0.049		1
10137	Butylbenzylphthalate	85-68-7	0.073	J	0.049	0.98		1
10137	Di-n-butylphthalate	84-74-2	0.13	J	0.049	0.98		1
10137	Chrysene	218-01-9	0.0098	U	0.0098	0.049		1
10137	Dibenz(a,h)anthracene	53-70-3	0.0098	U	0.0098	0.049		1
10137	Diethylphthalate	84-66-2	0.049	U	0.049	0.98		1
10137	Dimethylphthalate	131-11-3	0.049	U	0.049	0.98		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.21	J	0.049	0.98		1
10137	Fluoranthene	206-44-0	0.0098	U	0.0098	0.049		1
10137	Fluorene	86-73-7	0.0098	U	0.0098	0.049		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.0098	U	0.0098	0.049		1
10137	1-Methylnaphthalene	90-12-0	0.034	J	0.0098	0.049		1
10137	2-Methylnaphthalene	91-57-6	0.034	J	0.0098	0.049		1
10137	Naphthalene	91-20-3	0.23		0.029	0.049		1
10137	N-Nitrosodimethylamine	62-75-9	0.0098	U	0.0098	0.049		1
10137	Di-n-octylphthalate	117-84-0	0.049	U	0.049	0.98		1
10137	Phenanthrene	85-01-8	0.0098	U	0.0098	0.049		1
10137	Pyrene	129-00-0	0.0098	U	0.0098	0.049		1
Explosives	**SW-846 8330A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10131	4-Amino-2,6-Dinitrotoluene	19406-51-0	0.30	U	0.30	0.60	10000000	1
10131	2-Amino-4,6-Dinitrotoluene	35572-78-2	0.20	U	0.20	0.60	10000000	1
10131	2,6-Diamino-4-nitrotoluene	59229-75-3	0.20	U	0.20	0.60	10000000	1
10131	2,4-Diamino-6-nitrotoluene	6629-29-4	0.20	U	0.20	0.60	10000000	1
10131	1,3-Dinitrobenzene	99-65-0	0.20	U	0.20	0.60	10000000	1
10131	2,4-Dinitrotoluene	121-14-2	0.20	U	0.20	0.60	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/l		ug/l	ug/l	ug/l	
10131	2,6-Dinitrotoluene	606-20-2	0.20	U	0.20	0.60	10000000	1
10131	HMX	2691-41-0	0.65	U	0.65	2.0	10000000	1
10131	Nitrobenzene	98-95-3	0.20	U	0.20	0.60	10000000	1
10131	Nitroglycerin	55-63-0	5.2	U	5.2	15	10000000	1
10131	2-Nitrotoluene	88-72-2	0.20	U	0.20	0.60	10000000	1
10131	3-Nitrotoluene	99-08-1	0.40	U	0.40	1.2	10000000	1
10131	4-Nitrotoluene	99-99-0	0.60	U	0.60	1.2	10000000	1
10131	PETN	78-11-5	6.0	U	6.0	18	10000000	1
10131	RDX	121-82-4	0.20	U	0.20	0.60	10000000	1
10131	Tetryl	479-45-8	0.40	U	0.40	0.60	10000000	1
10131	1,3,5-Trinitrobenzene	99-35-4	0.20	U	0.20	0.60	10000000	1
10131	2,4,6-Trinitrotoluene	118-96-7	0.20	U	0.20	0.60	10000000	1
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	ug/l	
10407	2,4-D	94-75-7	0.16	U	0.16	0.49		1
10407	Dalapon	75-99-0	0.25	U	0.25	1.2		1
10407	2,4-DB	94-82-6	0.30	U	0.30	0.98		1
10407	Dicamba	1918-00-9	0.079	U	0.079	0.30		1
10407	Dinoseb	88-85-7	0.098	U	0.098	0.49		1
10407	2,4-DP (Dichlorprop)	120-36-5	0.16	U	0.16	0.49		1
10407	MCPA	94-74-6	300	U	300	980		1
10407	MCPP	93-65-2	49	U	49	200		1
10407	2,4,5-T	93-76-5	0.015	U	0.015	0.049		1
10407	2,4,5-TP	93-72-1	0.0098	U	0.0098	0.049		1
HPLC Organics	**SW-846 8315A**		ug/l		ug/l	ug/l	ug/l	
04144	25b Formaldehyde 8315A	50-00-0	10	U	10	50		1
	The LCS/LCSD recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs	**SW-846 8081A**		ug/l		ug/l	ug/l	ug/l	
00177	Aldrin	309-00-2	0.0020	U	0.0020	0.0098		1
00177	Alpha BHC	319-84-6	0.0029	U	0.0029	0.0098		1
00177	Beta BHC	319-85-7	0.0028	U	0.0028	0.0098		1
00177	Gamma BHC - Lindane	58-89-9	0.0020	U	0.0020	0.0098		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
00177	Chlordane	57-74-9	0.12	U	0.12	0.49		1
00177	p,p-DDD	72-54-8	0.0049	U	0.0049	0.020		1
00177	p,p-DDE	72-55-9	0.0049	U	0.0049	0.020		1
00177	p,p-DDT	50-29-3	0.0049	U	0.0049	0.020		1
00177	Delta BHC	319-86-8	0.0028	U	0.0028	0.0098		1
00177	Dieldrin	60-57-1	0.0052	U	0.0052	0.020		1
00177	Endosulfan I	959-98-8	0.0042	U	0.0042	0.0098		1
00177	Endosulfan II	33213-65-9	0.015	U	0.015	0.020		1
00177	Endosulfan Sulfate	1031-07-8	0.0057	U	0.0057	0.020		1
00177	Endrin	72-20-8	0.0079	U	0.0079	0.020		1
00177	Endrin Aldehyde	7421-93-4	0.020	U	0.020	0.098		1
00177	Endrin Ketone	53494-70-5	0.0049	U	0.0049	0.020		1
00177	Heptachlor	76-44-8	0.0025	U	0.0025	0.0098		1
00177	Heptachlor Epoxide	1024-57-3	0.0022	U	0.0022	0.0098		1
00177	Methoxychlor	72-43-5	0.029	U	0.029	0.098		1
00177	Mirex	2385-85-5	0.083	U	0.083	0.24		1
00177	Toxaphene	8001-35-2	0.98	U	0.98	2.9		1
Pesticides/PCBs	**SW-846 8082**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10227	Aroclor 5432	63496-31-1	0.098	U	0.098	0.49		1
10227	Aroclor 5442	12642-23-8	0.098	U	0.098	0.49		1
10227	Aroclor 5460	11126-42-4	0.098	U	0.098	0.49		1
10227	PCB-1016	12674-11-2	0.098	U	0.098	0.49		1
10227	PCB-1221	11104-28-2	0.098	U	0.098	0.49		1
10227	PCB-1232	11141-16-5	0.20	U	0.20	0.49		1
10227	PCB-1242	53469-21-9	0.098	U	0.098	0.49		1
10227	PCB-1248	12672-29-6	0.098	U	0.098	0.49		1
10227	PCB-1254	11097-69-1	0.098	U	0.098	0.49		1
10227	PCB-1260	11096-82-5	0.15	U	0.15	0.49		1
10227	PCB-1262	37324-23-5	0.20	U	0.20	0.49		1
10227	PCB-1268	11100-14-4	0.16	U	0.16	0.49		1
GC Extractable TPH	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.097	U	0.097	0.58		1
10365	EFH (C15-C20)	n.a.	0.097	U	0.097	0.58		1
10365	EFH (C21-C30)	n.a.	0.097	U	0.097	0.58		1
10365	EFH (C30 - C40)	n.a.	0.097	U	0.097	0.58		1
10365	EFH (C8-C11)	n.a.	0.097	U	0.097	0.58		1
Terphenyls	**SW-846 8015B**		**mg/l**		**mg/l**	**mg/l**	**mg/l**	
10319	m-Terphenyl	92-06-8	0.078	U	0.078	0.24		1
10319	o-Terphenyl	84-15-1	0.078	U	0.078	0.24		1
10319	p-Terphenyl	92-94-4	0.078	U	0.078	0.24		1
	The surrogate data is outside the QC limits. Due to insufficient sample volume, a repeat analysis could not be performed to confirm the results.							
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	**mg/l**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.0834 U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138 U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702 U	0.0702	0.200		1
01754	Iron	7439-89-6	0.0522 U	0.0522	0.200		1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500		1
	SW-846 6020		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00053 U	0.00053	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000052 U	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.000046 U	0.000046	0.00020		1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
	EPA 314.0		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
	SW-846 7199		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1
	SW-846 9012B		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
08255	17b Cyanide by 9012B	57-12-5	0.0050 U	0.0050	0.010		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9040B**		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00200	18b pH by 9040B	n.a.	5.4	0.010	0.010		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	15b NDMA by 1625C	EPA 1625C	1	11144WAA026	05/25/2011 19:09	Gregory J Drahovsky	1
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	11146WAD026	06/06/2011 00:06	Linda M Hartenstine	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11144WAK026	05/26/2011 13:29	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	11146WAD026	05/26/2011 16:00	Timothy J Attenberger	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	11144WAK026	05/25/2011 09:50	Catherine R Wiker	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11144WAA026	05/24/2011 13:25	Wanda F Oswald	1
10131	16b Energetics by 8330A	SW-846 8330A	1	111580002A	06/09/2011 00:05	Michele D Hamilton	1
04144	25b Formaldehyde 8315A	SW-846 8315A	1	111440027A	05/27/2011 00:09	Michele D Hamilton	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	111450014A	05/27/2011 00:36	Michele D Hamilton	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	111460040A	06/03/2011 06:26	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	111460041A	05/28/2011 14:10	Richard A Shober	1
11117	PCB Waters Extraction	SW-846 3510C	1	111460041A	05/27/2011 14:00	Kelli M Barto	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	111460040A	05/27/2011 14:00	Kelli M Barto	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	111450014A	05/25/2011 20:00	Elaine F Stoltzfus	1
01013	Formaldehyde Extraction	SW-846 8315A	1	111440027A	05/25/2011 08:30	Denise L Trimby	1
11122	Energetics Extraction	SW-846 8330	2	111580002A	06/07/2011 18:00	Kelli M Barto	1
10365	9b TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111450031A	06/03/2011 01:53	Heather E Williams	1
10319	20b Terphenyls by 8015B	SW-846 8015B	1	111450009A	05/26/2011 19:06	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	111450031A	05/26/2011 08:00	Catherine R Wiker	1
10304	Terphenyls water prep	SW-846 3510C	1	111450009A	05/25/2011 17:30	Kathryn I DeHaven	1
01743	Aluminum	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
08014	Boron	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01756	Lithium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
07058	Manganese	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
10143	Phosphorus	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01762	Potassium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01767	Sodium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
08068	Strontium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
07069	Tin	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
07070	Titanium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
10144	Zirconium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
06024	Antimony	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06026	Barium	SW-846 6020	1	111446050005D	05/27/2011 17:11	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06033	Copper	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06035	Lead	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	111446050005C	05/27/2011 17:11	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	111446050005B	05/27/2011 17:11	Choon Y Tian	1
06042	Silver	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06045	Thallium	SW-846 6020	2	111536050004A	06/03/2011 06:49	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
00259	Mercury	SW-846 7470A	2	111465713002	05/31/2011 15:11	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	111441848008	05/25/2011 10:52	James L Mertz	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	111446050005	05/25/2011 11:46	James L Mertz	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	2	111536050004	06/02/2011 23:00	Mirit S Shenouda	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	111465713002	05/26/2011 15:20	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	11144196901B	05/25/2011 05:58	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	11154621701A	06/03/2011 15:31	William L Hamaker Jr	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	11143495401B	05/24/2011 11:58	Parker D Lindstrom	1
08255	17b Cyanide by 9012B	SW-846 9012B	1	11146117101B	05/26/2011 19:00	Joseph E McKenzie	1
08256	Cyanide Water Distillation	SW-846 9012B	1	11146117101B	05/26/2011 09:40	Nancy J Shoop	1
00200	18b pH by 9040B	SW-846 9040B	1	11144020001A	05/24/2011 19:50	Luz M Groff	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	580		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	580		1
04688	Benzyl alcohol	100-51-6	190	U	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580		1
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	380		1
04688	Fluoranthene	206-44-0	37	J	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	580		1
04688	Phenanthrene	85-01-8	25	J	19	190		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	Pyrene	129-00-0	34	J	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.8	U	3.8	9.5		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.5		5
10138	Anthracene	120-12-7	1.9	U	1.9	9.5		5
10138	Benzo(a)anthracene	56-55-3	8.2	J	3.8	9.5		5
10138	Benzo(a)pyrene	50-32-8	12		3.8	9.5		5
10138	Benzo(b)fluoranthene	205-99-2	23		3.8	9.5		5
10138	Benzo(g,h,i)perylene	191-24-2	7.3	J	3.8	9.5		5
10138	Benzo(k)fluoranthene	207-08-9	6.6	J	3.8	9.5		5
10138	Chrysene	218-01-9	14		1.9	9.5		5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U	3.8	9.5		5
10138	Fluorene	86-73-7	3.8	U	3.8	9.5		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	6.0	J	3.8	9.5		5
10138	1-Methylnaphthalene	90-12-0	3.8	U	3.8	9.5		5
10138	2-Methylnaphthalene	91-57-6	3.8	U	3.8	9.5		5
10138	Naphthalene	91-20-3	3.8	U	3.8	9.5		5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U	3.8	9.5		5
	Reporting limits were raised due to interference from the sample matrix.							
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	14	U	14	41		10
10401	Dalapon	75-99-0	51	U	51	100		10
10401	2,4-DB	94-82-6	7.1	U	7.1	20		10
10401	Dicamba	1918-00-9	4.6	U	4.6	14		10
10401	Dinoseb	88-85-7	9.2	U	9.2	28		10
10401	2,4-DP (Dichlorprop)	120-36-5	9.2	U	9.2	20		10
10401	MCPA	94-74-6	880	U	880	2,900		10
10401	MCPP (Mecoprop)	93-65-2	11,000	U	11,000	11,000		10

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4,5-T	93-76-5	1.0	U	1.0	2.0		10
10401	2,4,5-TP	93-72-1	1.4	J	0.86	2.0		10

Reporting limits were raised due to interference from the sample matrix.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPP and 2,4,5-T

Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.39	U	0.39	1.9		10
01363	Beta BHC	319-85-7	0.69	U	0.69	1.9		10
01363	Gamma BHC - Lindane	58-89-9	2.3	U	2.3	2.3		10
01363	Chlordane	57-74-9	5.1	U	5.1	5.1		1
01363	p,p-DDD	72-54-8	0.076	U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.42	U	0.42	0.42		1
01363	p,p-DDT	50-29-3	0.37	J	0.076	0.39		1
01363	Delta BHC	319-86-8	0.42	U	0.42	1.9		10
01363	Dieldrin	60-57-1	0.20	U	0.20	0.39		1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076	U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076	U	0.076	0.39		1
01363	Endrin	72-20-8	0.076	U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.076	U	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069	U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039	U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.12	U	0.12	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. Similar sample results are observed for both.

Reporting limits were raised due to interference from the sample matrix.

The surrogate recovery for the reextract is low.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5460	11126-42-4	2.7	J	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	2.0		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	2.0		1
10225	PCB-1248	12672-29-6	4.8		0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0		1
10225	PCB-1260	11096-82-5	2.3		0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	7,420		5.82	23.1		1
07914	Boron	7440-42-8	1.03	U	1.03	5.79		1
01650	Calcium	7440-70-2	8,220		7.09	23.1		1
01654	Iron	7439-89-6	10,300		5.45	23.1		1
01656	Lithium	7439-93-2	11.1		0.25	2.3		1
01657	Magnesium	7439-95-4	2,250		2.94	11.6		1
06958	Manganese	7439-96-5	162		0.0903	0.579		1
10145	Phosphorus	7723-14-0	356		0.648	11.6		1
01662	Potassium	7440-09-7	1,580		20.8	57.9		1
01667	Sodium	7440-23-5	113	J	43.2	116		1
07968	Strontium	7440-24-6	26.4		0.0718	0.579		1
06969	Tin	7440-31-5	2.36	J	1.16	11.6		1
06970	Titanium	7440-32-6	637		0.440	1.16		1
10146	Zirconium	7440-67-7	1.91	J	0.972	5.79		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.306		0.0681	0.227		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	3.05		0.0908	0.454		2
06126	Barium	7440-39-3	77.2		0.123	0.454		2
06127	Beryllium	7440-41-7	0.336		0.0182	0.113		2
06128	Cadmium	7440-43-9	0.512		0.0454	0.113		2
06131	Chromium	7440-47-3	10.8		0.136	0.454		2
06132	Cobalt	7440-48-4	2.74		0.0227	0.113		2
06133	Copper	7440-50-8	9.14		0.0749	0.454		2
06135	Lead	7439-92-1	14.7		0.0118	0.227		2
06138	Molybdenum	7439-98-7	1.11		0.0567	0.113		2
06139	Nickel	7440-02-0	9.45		0.113	0.454		2
06141	Selenium	7782-49-2	0.154	J	0.0454	0.454		2
06142	Silver	7440-22-4	0.220		0.0136	0.113		2
06145	Thallium	7440-28-0	0.185		0.0340	0.113		2
06148	Vanadium	7440-62-2	24.0		0.0250	0.113		2
06149	Zinc	7440-66-6	146		0.635	3.40		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 7471A**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0131 J	0.0033	0.114		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.0	0.93	1.2		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.7		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.23 U	0.23	1.2		1
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	7.19	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	Moisture Content by 160.3 "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.	n.a.	13.6	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 19:10	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/09/2011 15:44	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/31/2011 13:33	Michele D Hamilton	10
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 13:02	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 13:15	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 10:46	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 01:04	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 01:04	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:06	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	06/01/2011 00:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 23:18	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 18:56	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 06/20/2011 09:34

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B111471AA	Sample number(s): 6296035-6296037,6296039									
Acetone	9.6		6.7	8.0	ug/kg	159	153	32-209	4	30
Benzene	0.10	U	0.10	4.0	ug/kg	106	103	80-120	2	30
Bromobenzene	0.13	U	0.13	4.0	ug/kg	99	98	79-120	1	30
Bromochloromethane	0.33	U	0.33	4.0	ug/kg	106	101	79-124	5	30
Bromodichloromethane	0.08	U	0.08	4.0	ug/kg	100	96	78-120	4	30
Bromoform	0.40	U	0.40	4.0	ug/kg	94	93	70-120	1	30
Bromomethane	0.25	U	0.25	4.0	ug/kg	73	73	32-162	1	30
2-Butanone	1.2	U	1.2	8.0	ug/kg	134	124	46-153	8	30
n-Butylbenzene	0.12	U	0.12	4.0	ug/kg	102	102	72-120	0	30
sec-Butylbenzene	0.06	U	0.06	4.0	ug/kg	103	103	75-120	1	30
tert-Butylbenzene	0.16	U	0.16	4.0	ug/kg	102	100	75-120	2	30
Carbon Tetrachloride	0.14	U	0.14	4.0	ug/kg	105	99	69-122	6	30
Chlorobenzene	0.11	U	0.11	4.0	ug/kg	103	100	80-120	2	30
Chloroethane	0.13	U	0.13	4.0	ug/kg	67	67	37-154	0	30
2-Chloroethyl Vinyl Ether	0.30	U	0.30	4.0	ug/kg	95	91	43-146	5	30
Chloroform	0.12	U	0.12	4.0	ug/kg	107	101	80-120	6	30
Chloromethane	0.33	U	0.33	4.0	ug/kg	81	80	54-132	0	30
2-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	99	99	78-120	0	30
4-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	103	102	79-120	1	30
Chlorotrifluoroethene	0.50	U	0.50	5.0	ug/kg	98	101	22-131	3	30
1,2-Dibromo-3-chloropropane	0.70	U	0.70	4.0	ug/kg	101	96	58-120	5	30
Dibromochloromethane	0.20	U	0.20	4.0	ug/kg	97	95	77-120	2	30
1,2-Dibromoethane	0.17	U	0.17	4.0	ug/kg	103	99	80-120	5	30
Dibromomethane	0.24	U	0.24	4.0	ug/kg	100	96	80-120	3	30
1,2-Dichlorobenzene	0.09	U	0.09	4.0	ug/kg	101	100	79-120	1	30
1,3-Dichlorobenzene	0.12	U	0.12	4.0	ug/kg	97	97	78-120	0	30
1,4-Dichlorobenzene	0.16	U	0.16	4.0	ug/kg	99	98	79-120	1	30
Dichlorodifluoromethane	0.12	U	0.12	4.0	ug/kg	71	67	20-120	6	30
1,1-Dichloroethane	0.10	U	0.10	4.0	ug/kg	106	102	80-120	4	30
1,2-Dichloroethane	0.15	U	0.15	4.0	ug/kg	106	103	71-129	2	30
1,1-Dichloroethene	0.39	U	0.39	4.0	ug/kg	108	103	73-123	5	30
cis-1,2-Dichloroethene	0.19	U	0.19	4.0	ug/kg	103	99	80-120	5	30
trans-1,2-Dichloroethene	0.12	U	0.12	4.0	ug/kg	104	100	79-120	4	30
1,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	102	99	80-120	2	30
1,3-Dichloropropane	0.08	U	0.08	4.0	ug/kg	104	101	80-120	3	30
2,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	100	96	72-123	4	30
1,1-Dichloropropene	0.13	U	0.13	4.0	ug/kg	106	102	77-120	4	30
cis-1,3-Dichloropropene	0.16	U	0.16	4.0	ug/kg	98	96	80-120	2	30
trans-1,3-Dichloropropene	0.17	U	0.17	4.0	ug/kg	95	93	77-120	2	30
Ethylbenzene	0.06	U	0.06	4.0	ug/kg	104	103	80-120	1	30
Freon 113	0.11	U	0.11	4.0	ug/kg	106	99	61-126	7	30
Freon 133a	0.50	U	0.50	5.0	ug/kg	77*	77*	78-120	0	30
Hexachlorobutadiene	0.14	U	0.14	4.0	ug/kg	89	90	57-120	0	30
2-Hexanone	1.6	U	1.6	8.0	ug/kg	123	118	45-155	4	30
Isopropylbenzene	0.06	U	0.06	4.0	ug/kg	106	105	76-120	1	30
p-Isopropyltoluene	0.11	U	0.11	4.0	ug/kg	101	102	75-120	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21	U	0.21	4.0	ug/kg	103	99	74-121	4	30
4-Methyl-2-pentanone	0.39	U	0.39	8.0	ug/kg	107	101	61-134	5	30
Methylene Chloride	1.1	J	0.24	4.0	ug/kg	110	103	76-124	6	30
n-Propylbenzene	0.07	U	0.07	4.0	ug/kg	108	107	77-120	1	30
Styrene	0.10	U	0.10	4.0	ug/kg	104	102	76-120	2	30
1,1,1,2-Tetrachloroethane	0.11	U	0.11	4.0	ug/kg	101	99	80-120	2	30
1,1,2,2-Tetrachloroethane	0.23	U	0.23	4.0	ug/kg	98	94	71-123	4	30
Tetrachloroethene	0.20	U	0.20	4.0	ug/kg	103	99	77-120	3	30
Toluene	0.08	U	0.08	4.0	ug/kg	103	102	80-120	1	30
1,2,3-Trichlorobenzene	0.14	U	0.14	4.0	ug/kg	92	94	64-120	2	30
1,2,4-Trichlorobenzene	0.18	U	0.18	4.0	ug/kg	87	90	68-120	3	30
1,1,1-Trichloroethane	0.20	U	0.20	4.0	ug/kg	102	99	71-125	3	30
1,1,2-Trichloroethane	0.27	U	0.27	4.0	ug/kg	101	98	80-120	3	30
Trichloroethene	0.15	U	0.15	4.0	ug/kg	101	99	80-120	3	30
Trichlorofluoromethane	0.29	U	0.29	4.0	ug/kg	89	83	58-133	7	30
1,2,3-Trichloropropane	0.33	U	0.33	4.0	ug/kg	97	95	71-123	3	30
1,2,4-Trimethylbenzene	0.40	U	0.40	4.0	ug/kg	102	102	79-120	0	30
1,3,5-Trimethylbenzene	0.10	U	0.10	4.0	ug/kg	104	103	78-120	1	30
Vinyl Chloride	0.20	U	0.20	4.0	ug/kg	81	79	53-120	2	30
m+p-Xylene	0.17	U	0.17	4.0	ug/kg	106	105	80-120	2	30
o-Xylene	0.17	U	0.17	4.0	ug/kg	103	103	80-120	1	30
Batch number: E111461AA	Sample number(s): 6296041									
1,4-Dioxane	0.5	U	0.5	2.0	ug/l	97	106	80-123	9	30
Batch number: E111462AA	Sample number(s): 6296035-6296037,6296039									
1,4-Dioxane	5.0	U	5.0	15	ug/kg	104	104	70-130	0	30
Batch number: L111471AA	Sample number(s): 6296041									
Acetone	6	U	6.	20	ug/l	134	111	49-234	19	30
Benzene	0.5	U	0.5	5	ug/l	97	98	79-120	1	30
Bromobenzene	1	U	1.	5	ug/l	92	93	80-120	1	30
Bromochloromethane	1	U	1.	5	ug/l	95	94	80-120	1	30
Bromodichloromethane	1	U	1.	5	ug/l	90	91	80-120	1	30
Bromoform	1	U	1.	5	ug/l	78	80	61-120	2	30
Bromomethane	1	U	1.	5	ug/l	102	103	44-120	1	30
2-Butanone	3	U	3.	10	ug/l	105	97	66-151	8	30
n-Butylbenzene	1	U	1.	5	ug/l	96	97	74-120	1	30
sec-Butylbenzene	1	U	1.	5	ug/l	91	94	78-120	4	30
tert-Butylbenzene	1	U	1.	5	ug/l	91	93	80-120	2	30
Carbon Tetrachloride	1	U	1.	5	ug/l	89	89	75-123	0	30
Chlorobenzene	0.8	U	0.8	5	ug/l	92	93	80-120	2	30
Chloroethane	1	U	1.	5	ug/l	103	103	49-129	0	30
2-Chloroethyl Vinyl Ether	2	U	2.	10	ug/l	92	93	56-129	1	30
Chloroform	0.8	U	0.8	5	ug/l	96	97	77-122	2	30
Chloromethane	1	U	1.	5	ug/l	99	100	60-129	1	30
2-Chlorotoluene	1	U	1.	5	ug/l	93	94	80-120	1	30
4-Chlorotoluene	1	U	1.	5	ug/l	94	97	80-120	3	30
Chlorotrifluoroethene	2	U	2.	5	ug/l	92	91	38-136	1	30
1,2-Dibromo-3-chloropropane	2	U	2.	5	ug/l	86	87	56-126	1	30
Dibromochloromethane	1	U	1.	5	ug/l	87	87	80-120	0	30
1,2-Dibromoethane	1	U	1.	5	ug/l	94	95	80-120	1	30
Dibromomethane	1	U	1.	5	ug/l	90	90	80-120	1	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	93	94	80-120	1	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	93	94	80-120	1	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	94	95	80-120	1	30
Dichlorodifluoromethane	2	U	2.	5	ug/l	81	83	47-120	3	30
1,1-Dichloroethane	1	U	1.	5	ug/l	95	96	79-120	2	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloroethane	1	U	1.	5	ug/l	97	96	70-130	2	30
1,1-Dichloroethene	0.8	U	0.8	5	ug/l	90	90	74-123	0	30
cis-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	93	94	80-120	2	30
trans-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	92	95	80-120	3	30
1,2-Dichloropropane	1	U	1.	5	ug/l	95	95	78-120	0	30
1,3-Dichloropropane	1	U	1.	5	ug/l	95	97	80-120	2	30
2,2-Dichloropropane	1	U	1.	5	ug/l	88	89	77-124	1	30
1,1-Dichloropropene	1	U	1.	5	ug/l	91	93	80-120	2	30
cis-1,3-Dichloropropene	1	U	1.	5	ug/l	91	91	80-120	0	30
trans-1,3-Dichloropropene	1	U	1.	5	ug/l	87	91	79-120	5	30
Ethylbenzene	0.8	U	0.8	5	ug/l	94	96	79-120	2	30
Freon 113	2	U	2.	10	ug/l	88	90	69-128	3	30
Freon 133a	2	U	2.	5	ug/l	105	101	77-120	5	30
Hexachlorobutadiene	2	U	2.	5	ug/l	81	84	58-120	4	30
2-Hexanone	3	U	3.	10	ug/l	93	92	65-136	2	30
Isopropylbenzene	1	U	1.	5	ug/l	94	96	77-120	2	30
p-Isopropyltoluene	1	U	1.	5	ug/l	91	91	80-120	1	30
Methyl Tertiary Butyl Ether	0.5	U	0.5	5	ug/l	92	92	76-120	0	30
4-Methyl-2-pentanone	3	U	3.	10	ug/l	90	90	70-121	0	30
Methylene Chloride	2	U	2.	5	ug/l	95	96	80-120	2	30
n-Propylbenzene	1	U	1.	5	ug/l	95	93	80-120	3	30
Styrene	1	U	1.	5	ug/l	91	94	80-120	3	30
1,1,1,2-Tetrachloroethane	1	U	1.	5	ug/l	89	92	80-120	3	30
1,1,2,2-Tetrachloroethane	1	U	1.	5	ug/l	100	99	71-120	1	30
Tetrachloroethene	0.8	U	0.8	5	ug/l	90	91	80-121	1	30
Toluene	0.7	U	0.7	5	ug/l	95	96	79-120	2	30
1,2,3-Trichlorobenzene	1	U	1.	5	ug/l	87	89	65-120	2	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	82	84	67-120	2	30
1,1,1-Trichloroethane	0.8	U	0.8	5	ug/l	95	94	75-127	1	30
1,1,2-Trichloroethane	0.8	U	0.8	5	ug/l	95	95	80-120	0	30
Trichloroethene	1	U	1.	5	ug/l	92	92	80-120	0	30
Trichlorofluoromethane	2	U	2.	5	ug/l	100	101	64-129	2	30
1,2,3-Trichloropropane	1	U	1.	5	ug/l	93	95	80-120	2	30
1,2,4-Trimethylbenzene	1	U	1.	5	ug/l	94	96	74-120	2	30
1,3,5-Trimethylbenzene	1	U	1.	5	ug/l	93	94	75-120	0	30
Vinyl Chloride	1	U	1.	5	ug/l	97	99	65-125	2	30
m+p-Xylene	0.8	U	0.8	5	ug/l	93	95	80-120	2	30
o-Xylene	0.8	U	0.8	5	ug/l	92	93	80-120	1	30
Batch number: 11144WAA026	Sample number(s): 6296055									
N-Nitrosodimethylamine	0.500	U	0.500	1.00	ng/l	104	96	70-130	8	30
Batch number: 11144WAK026	Sample number(s): 6296055									
Acenaphthene	0.010	U	0.010	0.050	ug/l	96	99	74-109	4	30
Acenaphthylene	0.010	U	0.010	0.050	ug/l	98	103	70-110	6	30
Anthracene	0.010	U	0.010	0.050	ug/l	102	104	66-111	2	30
Benzo(a)anthracene	0.010	U	0.010	0.050	ug/l	103	105	72-114	2	30
Benzo(a)pyrene	0.010	U	0.010	0.050	ug/l	142*	146*	60-127	3	30
Benzo(b)fluoranthene	0.010	U	0.010	0.050	ug/l	145*	148*	69-123	2	30
Benzo(g,h,i)perylene	0.010	U	0.010	0.050	ug/l	147*	152*	57-131	4	30
Benzo(k)fluoranthene	0.010	U	0.010	0.050	ug/l	143*	147*	59-130	3	30
Butylbenzylphthalate	0.070	J	0.050	1.0	ug/l	105	109	40-138	4	30
Di-n-butylphthalate	0.082	J	0.050	1.0	ug/l	102	105	74-131	3	30
Chrysene	0.010	U	0.010	0.050	ug/l	101	103	76-116	2	30
Dibenz(a,h)anthracene	0.010	U	0.010	0.050	ug/l	147*	153*	55-134	4	30
Diethylphthalate	0.050	U	0.050	1.0	ug/l	98	102	57-134	4	30
Dimethylphthalate	0.050	U	0.050	1.0	ug/l	97	103	40-119	6	30
Bis(2-Ethylhexyl)phthalate	0.11	J	0.050	1.0	ug/l	121	124	57-154	2	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	0.010	U	0.010	0.050	ug/l	102	104	75-116	2	30
Fluorene	0.010	U	0.010	0.050	ug/l	102	107	75-114	5	30
Indeno(1,2,3-cd)pyrene	0.010	U	0.010	0.050	ug/l	147*	152*	69-124	3	30
1-Methylnaphthalene	0.010	U	0.010	0.050	ug/l	101	96	71-117	5	30
2-Methylnaphthalene	0.010	U	0.010	0.050	ug/l	90	85	75-115	5	30
Naphthalene	0.030	U	0.030	0.050	ug/l	97	96	72-109	1	30
N-Nitrosodimethylamine	0.010	U	0.010	0.050	ug/l	63	69	36-89	9	30
Di-n-octylphthalate	0.050	U	0.050	1.0	ug/l	144	152*	57-145	6	30
Phenanthrene	0.010	U	0.010	0.050	ug/l	97	99	76-111	2	30
Pyrene	0.010	U	0.010	0.050	ug/l	96	98	69-118	2	30
Batch number: 11145SLD026	Sample number(s): 6296035-6296040,6296042-6296049,6296051-6296054,6296056									
Acenaphthene	17	U	17.	170	ug/kg	81		76-111		
Acenaphthylene	17	U	17.	170	ug/kg	85		75-122		
Aniline	170 U		170.	500	ug/kg	63		34-94		
Anthracene	17	U	17.	170	ug/kg	84		76-112		
Benzidine	1,200 U		1,200.	3,300	ug/kg	38		15-121		
Benzo(a)anthracene	17	U	17.	170	ug/kg	85		73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	87		69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	87		61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	82		65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	83		67-125		
Benzoic acid	170 U		170.	500	ug/kg	104		62-113		
Benzyl alcohol	170 U		170.	500	ug/kg	96		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	75*		79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	91		75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	84		79-112		
Carbazole	17	U	17.	170	ug/kg	89		77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	97		74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	51		10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	78		70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	82		70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	82		68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	70		49-128		
2-Chlorophenol	17	U	17.	170	ug/kg	93		72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	84		79-110		
Chrysene	17	U	17.	170	ug/kg	85		76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	82		70-128		
Dibenzofuran	17	U	17.	170	ug/kg	86		79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	80		79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	77		70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	78		74-106		
3,3'-Dichlorobenzidine	100 U		100.	330	ug/kg	55		24-101		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	88		75-111		
Diethylphthalate	17	U	17.	170	ug/kg	89		76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	85		72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	94		70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	85		77-109		
4,6-Dinitro-2-methylphenol	170 U		170.	500	ug/kg	80		53-110		
2,4-Dinitrophenol	330 U		330.	1,000	ug/kg	88		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	97		73-115		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	88		79-115		
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	77		77-111		
bis(2-Ethylhexyl)phthalate	17	U	17.	330	ug/kg	90		75-117		
Fluoranthene	17	U	17.	170	ug/kg	89		78-116		
Fluorene	17	U	17.	170	ug/kg	87		75-116		
Hexachlorobenzene	17	U	17.	170	ug/kg	75*		78-116		
Hexachlorobutadiene	67	U	67.	170	ug/kg	66*		70-112		
Hexachlorocyclopentadiene	170	U	170.	500	ug/kg	70		46-115		
Hexachloroethane	17	U	17.	170	ug/kg	76		68-105		
Indeno(1,2,3-cd)pyrene	17	U	17.	170	ug/kg	86		64-119		
Isophorone	17	U	17.	170	ug/kg	82		69-110		
1-Methylnaphthalene	17	U	17.	170	ug/kg	84		74-105		
2-Methylnaphthalene	17	U	17.	170	ug/kg	81		76-105		
2-Methylphenol	33	U	33.	170	ug/kg	93		66-110		
4-Methylphenol	33	U	33.	170	ug/kg	98		66-117		
Naphthalene	17	U	17.	170	ug/kg	79		73-106		
2-Nitroaniline	17	U	17.	170	ug/kg	95		78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	88		62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	76		49-98		
Nitrobenzene	17	U	17.	170	ug/kg	79		71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	80*		81-114		
4-Nitrophenol	170	U	170.	500	ug/kg	90		56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	88		63-107		
N-Nitrosodimethylamine	33	U	33.	170	ug/kg	76		60-106		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	81		67-141		
Di-n-octylphthalate	17	U	17.	170	ug/kg	87		68-130		
Pentachlorophenol	170	U	170.	500	ug/kg	77		51-117		
Phenanthrene	17	U	17.	170	ug/kg	81		77-113		
Phenol	17	U	17.	170	ug/kg	97		58-112		
Pyrene	17	U	17.	170	ug/kg	87		75-115		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	74		73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	87		76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	84		78-111		

Batch number: 11145SLF026 Sample number(s): 6296035-6296040,6296042-6296049,6296051-6296054,6296056

Acenaphthene	0.67	U	0.67	1.7	ug/kg	94		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	86		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	94		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	100		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	119		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	129		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	122		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	132		54-142		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	102		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	109		75-137		
Chrysene	0.33	U	0.33	1.7	ug/kg	103		73-114		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	123		53-138		
Diethylphthalate	6.0	U	6.0	18	ug/kg	103		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	101		79-121		
Bis(2-Ethylhexyl)phthalate	6.0	U	6.0	18	ug/kg	110		67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	103		64-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	99		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	123		56-134		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	93		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	83		62-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Naphthalene	0.67	U	0.67	1.7	ug/kg	88		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	82		55-118		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	134		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	99		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	100		56-121		
Batch number: 11146SLE026	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054									
N-Nitrosodimethylamine	16.7	U	16.7	33.3	ng/kg	83		70-130		
Batch number: 11146WAD026	Sample number(s): 6296055									
Aniline	1	U	1.	5	ug/l	71	76	49-101	6	30
Benzidine	20	U	20.	60	ug/l	68	74	34-117	9	30
Benzoic acid	6	U	6.	15	ug/l	44	26	10-69	51*	30
Benzyl alcohol	5	U	5.	15	ug/l	81	79	66-97	2	30
4-Bromophenyl-phenylether	1	U	1.	5	ug/l	91	92	82-117	0	30
Carbazole	1	U	1.	5	ug/l	96	94	81-114	2	30
4-Chloro-3-methylphenol	1	U	1.	5	ug/l	96	91	70-123	5	30
4-Chloroaniline	1	U	1.	5	ug/l	70	80	42-124	13	30
bis(2-Chloroethoxy)methane	1	U	1.	5	ug/l	92	93	74-124	1	30
bis(2-Chloroethyl)ether	1	U	1.	5	ug/l	91	89	77-108	2	30
bis(2-Chloroisopropyl)ether	1	U	1.	5	ug/l	91	90	62-127	1	30
2-Chloronaphthalene	2	U	2.	5	ug/l	95	97	54-132	2	30
2-Chlorophenol	1	U	1.	5	ug/l	97	92	77-108	6	30
4-Chlorophenyl-phenylether	2	U	2.	5	ug/l	93	92	82-111	1	30
Dibenzofuran	1	U	1.	5	ug/l	94	93	83-108	1	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	86	84	55-118	2	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	86	85	50-119	1	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	86	84	53-119	2	30
3,3'-Dichlorobenzidine	2	U	2.	5	ug/l	67	74	49-111	10	30
2,4-Dichlorophenol	1	U	1.	5	ug/l	95	90	80-109	5	30
2,4-Dimethylphenol	3	U	3.	10	ug/l	96	92	72-110	4	30
3,5-Dimethylphenol	3	U	3.	10	ug/l	104	99	70-130	4	30
4,6-Dinitro-2-methylphenol	5	U	5.	15	ug/l	100	93	78-119	8	30
2,4-Dinitrophenol	10	U	10.	30	ug/l	100	84	52-131	18	30
2,4-Dinitrotoluene	1	U	1.	5	ug/l	98	96	81-115	2	30
2,6-Dinitrotoluene	1	U	1.	5	ug/l	96	94	85-115	3	30
1,2-Diphenylhydrazine	1	U	1.	5	ug/l	99	96	78-116	3	30
Hexachlorobenzene	1	U	1.	5	ug/l	94	92	81-118	2	30
Hexachlorobutadiene	1	U	1.	5	ug/l	90	88	57-124	2	30
Hexachlorocyclopentadiene	5	U	5.	15	ug/l	77	76	36-118	1	30
Hexachloroethane	1	U	1.	5	ug/l	82	81	52-113	1	30
Isophorone	1	U	1.	5	ug/l	94	94	74-117	0	30
2-Methylphenol	1	U	1.	5	ug/l	84	82	64-101	3	30
4-Methylphenol	2	U	2.	5	ug/l	78	76	61-103	2	30
2-Nitroaniline	1	U	1.	5	ug/l	99	96	83-116	3	30
3-Nitroaniline	1	U	1.	5	ug/l	95	91	74-113	4	30
4-Nitroaniline	1	U	1.	5	ug/l	78	79	59-100	1	30
Nitrobenzene	1	U	1.	5	ug/l	92	92	75-109	0	30
2-Nitrophenol	1	U	1.	5	ug/l	93	93	86-120	0	30
4-Nitrophenol	10	U	10.	30	ug/l	47	46	16-78	2	30
N-Nitroso-di-n-propylamine	1	U	1.	5	ug/l	91	90	69-110	1	30
N-Nitrosodiphenylamine	2	U	2.	5	ug/l	94	92	67-136	2	30
Pentachlorophenol	3	U	3.	15	ug/l	98	90	53-110	8	30
Phenol	1	U	1.	5	ug/l	41	39	21-67	5	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	88	87	71-112	2	30
2,4,5-Trichlorophenol	1	U	1.	5	ug/l	98	93	79-107	6	30
2,4,6-Trichlorophenol	1	U	1.	5	ug/l	96	94	81-113	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11151A20A	Sample number(s): 6296041									
TPH-GRO S.CA water C5-C12	20	U	20.	50	ug/l	109	109	75-135	0	30
Batch number: 11151B34A	Sample number(s): 6296036									
9a TPH by EPA 8015B Gas C5-C12	0.2	U	0.2	1.0	mg/kg	68	74	67-119	8	30
Batch number: 111510006A	Sample number(s): 6296035-6296038,6296042-6296043,6296045-6296049,6296051,6296054									
4-Amino-2,6-Dinitrotoluene	60	U	60.	120	ug/kg	112		80-120		
2-Amino-4,6-Dinitrotoluene	40	U	40.	120	ug/kg	110		80-120		
2,6-Diamino-4-nitrotoluene	80	U	80.	240	ug/kg	100	96	54-134	3	30
2,4-Diamino-6-nitrotoluene	80	U	80.	240	ug/kg	99	96	54-134	3	30
1,3-Dinitrobenzene	40	U	40.	120	ug/kg	113		51-171		
2,4-Dinitrotoluene	40	U	40.	120	ug/kg	106		72-135		
2,6-Dinitrotoluene	40	U	40.	120	ug/kg	110		80-120		
HMX	100 U		100.	300	ug/kg	97		74-130		
Nitrobenzene	40	U	40.	120	ug/kg	110		80-120		
Nitroglycerin	800 U		800.	2,400	ug/kg	86		80-120		
2-Nitrotoluene	80	U	80.	120	ug/kg	107		78-128		
3-Nitrotoluene	100 U		100.	120	ug/kg	113		73-127		
4-Nitrotoluene	80	U	80.	120	ug/kg	106		80-120		
PETN	800 U		800.	2,400	ug/kg	116		80-120		
RDX	50	U	50.	120	ug/kg	100		75-131		
Tetryl	61	U	61.	120	ug/kg	104		70-168		
1,3,5-Trinitrobenzene	40	U	40.	120	ug/kg	107		77-137		
2,4,6-Trinitrotoluene	40	U	40.	120	ug/kg	111		80-120		
Batch number: 111580002A	Sample number(s): 6296055									
4-Amino-2,6-Dinitrotoluene	0.30	U	0.30	0.60	ug/l	110	110	80-120	0	30
2-Amino-4,6-Dinitrotoluene	0.20	U	0.20	0.60	ug/l	100	110	80-120	10	30
2,6-Diamino-4-nitrotoluene	0.20	U	0.20	0.60	ug/l	100	103	50-122	3	30
2,4-Diamino-6-nitrotoluene	0.20	U	0.20	0.60	ug/l	100	103	50-122	3	30
1,3-Dinitrobenzene	0.20	U	0.20	0.60	ug/l	110	110	72-117	0	30
2,4-Dinitrotoluene	0.20	U	0.20	0.60	ug/l	100	100	80-120	0	30
2,6-Dinitrotoluene	0.20	U	0.20	0.60	ug/l	110	110	80-120	0	30
HMX	0.65	U	0.65	2.0	ug/l	100	100	65-125	0	30
Nitrobenzene	0.20	U	0.20	0.60	ug/l	100	100	75-121	0	30
Nitroglycerin	5.2	U	5.2	15	ug/l	92	92	80-120	0	30
2-Nitrotoluene	0.20	U	0.20	0.60	ug/l	100	100	74-120	0	30
3-Nitrotoluene	0.40	U	0.40	1.2	ug/l	110*	110*	69-107	0	30
4-Nitrotoluene	0.60	U	0.60	1.2	ug/l	100	100	80-120	0	30
PETN	6.0	U	6.0	18	ug/l	117	117	80-120	0	30
RDX	0.20	U	0.20	0.60	ug/l	97	96	70-125	1	30
Tetryl	0.40	U	0.40	0.60	ug/l	100	99	72-141	1	30
1,3,5-Trinitrobenzene	0.20	U	0.20	0.60	ug/l	99	96	53-129	3	30
2,4,6-Trinitrotoluene	0.20	U	0.20	0.60	ug/l	100	100	76-109	0	30
Batch number: 111440027A	Sample number(s): 6296055									
25b Formaldehyde 8315A	10	U	10.	50	ug/l	62*	68*	69-130	9	30
Batch number: 111520004A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054									
25a Formaldehyde 8315A	600 U		600.	1,500	ug/kg	94		80-126		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 111450014A	Sample number(s): 6296055									
2,4-D	0.16	U	0.16	0.50	ug/l	120	116	73-157	3	30
Dalapon	0.25	U	0.25	1.3	ug/l	63	70	40-100	10	30
2,4-DB	0.30	U	0.30	1.0	ug/l	116	112	65-130	4	30
Dicamba	0.080	U	0.080	0.30	ug/l	96	92	68-135	4	30
Dinoseb	0.10	U	0.10	0.50	ug/l	74	74	32-91	0	30
2,4-DP (Dichlorprop)	0.16	U	0.16	0.50	ug/l	124	120	76-170	3	30
MCPA	300 U		300.	1,000	ug/l	90	88	65-128	2	30
MCPP	50	U	50.	200	ug/l	96	96	67-137	0	30
2,4,5-T	0.015	U	0.015	0.050	ug/l	112	108	63-147	4	30
2,4,5-TP	0.010	U	0.010	0.050	ug/l	104	108	63-134	4	30
Batch number: 111450020A	Sample number(s): 6296042-6296049,6296051-6296054,6296056									
2,4-D	1.2	U	1.2	3.6	ug/kg	95		73-146		
Dalapon	4.4	U	4.4	9.0	ug/kg	49		11-116		
2,4-DB	0.62	U	0.62	1.7	ug/kg	100		62-131		
Dicamba	0.40	U	0.40	1.2	ug/kg	78		54-121		
Dinoseb	0.80	U	0.80	2.4	ug/kg	8*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	103		62-170		
MCPA	76	U	76.	250	ug/kg	71		60-130		
MCPP (Mecoprop)	75	U	75.	250	ug/kg	101		54-137		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	90		73-143		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	83		68-114		
Batch number: 111520014A	Sample number(s): 6296036,6296039-6296040,6296042,6296054									
6a Perchlorate EPA 6850	2.1	U	2.1	5.0	ug/kg	104		85-115		
Batch number: 111460034A	Sample number(s): 6296035-6296040,6296042-6296049,6296051-6296054,6296056									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	81		36-106		
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	98		72-120		
PCB-1221	0.33	U	0.33	1.7	ug/kg					
PCB-1232	0.33	U	0.33	1.7	ug/kg					
PCB-1242	0.33	U	0.33	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.39	U	0.39	1.7	ug/kg	103		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 111460040A	Sample number(s): 6296055									
Aldrin	0.0020	U	0.0020	0.010	ug/l	101	111	54-159	10	30
Alpha BHC	0.0030	U	0.0030	0.010	ug/l	110	110	59-146	0	30
Beta BHC	0.0029	U	0.0029	0.010	ug/l	103	103	73-147	0	30
Gamma BHC - Lindane	0.0020	U	0.0020	0.010	ug/l	110	110	68-128	0	30
Chlordane	0.12	U	0.12	0.50	ug/l					
p,p-DDD	0.0050	U	0.0050	0.020	ug/l	120	120	71-139	0	30
p,p-DDE	0.0050	U	0.0050	0.020	ug/l	111	116	66-130	5	30
p,p-DDT	0.0050	U	0.0050	0.020	ug/l	114	114	53-126	0	30
Delta BHC	0.0029	U	0.0029	0.010	ug/l	113	113	76-148	0	30
Dieldrin	0.0053	U	0.0053	0.020	ug/l	125	125	76-132	0	30
Endosulfan I	0.0043	U	0.0043	0.010	ug/l	120	120	68-128	0	30
Endosulfan II	0.59		0.015	0.020	ug/l	110	110	59-144	0	30
Endosulfan Sulfate	0.0058	U	0.0058	0.020	ug/l	110	115	71-142	4	30
Endrin	0.0081	U	0.0081	0.020	ug/l	85	105	52-132	21	30
Endrin Aldehyde	0.020	U	0.020	0.10	ug/l	115	115	68-139	0	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Endrin Ketone	0.0050	U	0.0050	0.020	ug/l	130	125	69-146	4	30
Heptachlor	0.0026	U	0.0026	0.010	ug/l	120	130*	57-126	8	30
Heptachlor Epoxide	0.0023	U	0.0023	0.010	ug/l	102	112	73-156	10	30
Methoxychlor	0.030	U	0.030	0.10	ug/l	120	120	52-133	0	30
Mirex	0.085	U	0.085	0.25	ug/l					
Toxaphene	1.0	U	1.0	3.0	ug/l					
Batch number: 111460041A	Sample number(s): 6296055									
Aroclor 5432	0.10	U	0.10	0.50	ug/l					
Aroclor 5442	0.10	U	0.10	0.50	ug/l	72	84	35-84	15	30
Aroclor 5460	0.10	U	0.10	0.50	ug/l					
PCB-1016	0.10	U	0.10	0.50	ug/l	104	100	51-128	4	30
PCB-1221	0.10	U	0.10	0.50	ug/l					
PCB-1232	0.20	U	0.20	0.50	ug/l					
PCB-1242	0.10	U	0.10	0.50	ug/l					
PCB-1248	0.10	U	0.10	0.50	ug/l					
PCB-1254	0.10	U	0.10	0.50	ug/l					
PCB-1260	0.15	U	0.15	0.50	ug/l	96	102	56-135	6	30
PCB-1262	0.20	U	0.20	0.50	ug/l					
PCB-1268	0.16	U	0.16	0.50	ug/l					
Batch number: 111470004A	Sample number(s): 6296042-6296049,6296051-6296054,6296056									
Aldrin	0.066	U	0.066	0.17	ug/kg	79		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	112		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	91		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	115		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	131		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	95		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	119		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	97		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	104		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	100		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	97		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	112		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	110		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	94		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	98		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	100		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	94		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	126*		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					
Batch number: 111450031A	Sample number(s): 6296055									
EFH (C12-C14)	0.10	U	0.10	0.60	mg/l	100	92	69-125	8	30
EFH (C15-C20)	0.10	U	0.10	0.60	mg/l	104	96	77-125	8	30
EFH (C21-C30)	0.10	U	0.10	0.60	mg/l	100	92	68-124	8	30
EFH (C30 - C40)	0.10	U	0.10	0.60	mg/l	93	93	80-121	0	30
EFH (C8-C11)	0.10	U	0.10	0.60	mg/l	78	72	46-103	8	30
Batch number: 111480002A	Sample number(s): 6296042-6296043,6296045-6296049,6296051,6296054									
EFH (C12-C14)	0.40	U	0.40	1.2	mg/kg	96		71-118		
EFH (C15-C20)	0.40	U	0.40	1.2	mg/kg	100		76-122		
EFH (C21-C30)	0.40	U	0.40	1.2	mg/kg	100		69-132		
EFH (C30 - C40)	0.76	J	0.40	1.2	mg/kg	95		67-127		
EFH (C8-C11)	0.40	U	0.40	1.2	mg/kg	73		54-107		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 111570011A	Sample number(s): 6296036								
EFH (C12-C14)	0.40 U	0.40	1.2	mg/kg	88		71-118		
EFH (C15-C20)	0.40 U	0.40	1.2	mg/kg	94		76-122		
EFH (C21-C30)	0.40 U	0.40	1.2	mg/kg	99		69-132		
EFH (C30 - C40)	0.40 U	0.40	1.2	mg/kg	92		67-127		
EFH (C8-C11)	0.40 J	0.40	1.2	mg/kg	70		54-107		
Batch number: 111450001A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054								
Diethylene glycol	5.0 U	5.0	10	mg/kg	90		75-125		
Ethylene glycol	5.0 U	5.0	10	mg/kg	92		65-122		
Propylene glycol	5.0 U	5.0	10	mg/kg	90		75-125		
Batch number: 111450035A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054								
Ethanol	100 U	100.	500	ug/kg	91		71-129		
Isopropanol	100 U	100.	500	ug/kg	92		75-125		
Methanol	100 U	100.	500	ug/kg	94		68-129		
Batch number: 111450009A	Sample number(s): 6296055								
m-Terphenyl	0.080 U	0.080	0.25	mg/l	79	79	75-125	0	20
o-Terphenyl	0.080 U	0.080	0.25	mg/l	94	91	75-125	3	20
p-Terphenyl	0.080 U	0.080	0.25	mg/l	88	86	75-125	2	20
Batch number: 111510027A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054								
m-Terphenyl	1.5 U	1.5	3.5	mg/kg	87		75-125		
o-Terphenyl	1.5 U	1.5	3.5	mg/kg	101		75-125		
p-Terphenyl	1.5 U	1.5	3.5	mg/kg	95		75-125		
Batch number: 111441848008	Sample number(s): 6296055								
Aluminum	0.0834 U	0.0834	0.200	mg/l	96	97	90-112	1	20
Boron	0.0138 U	0.0138	0.0500	mg/l	92	93	89-110	1	20
Calcium	0.0702 U	0.0702	0.200	mg/l	100	100	90-112	0	20
Iron	0.0522 U	0.0522	0.200	mg/l	100	101	90-112	2	20
Lithium	0.0024 U	0.0024	0.0200	mg/l	97	97	80-120	0	20
Magnesium	0.0172 U	0.0172	0.100	mg/l	98	99	89-110	0	20
Manganese	0.00084 U	0.00084	0.0050	mg/l	100	101	90-110	1	20
Phosphorus	0.0089 U	0.0089	0.100	mg/l	97	98	80-120	1	20
Potassium	0.239 U	0.239	0.500	mg/l	97	95	85-115	3	20
Sodium	0.433 U	0.433	1.00	mg/l	96	96	87-114	0	20
Strontium	0.00089 U	0.00089	0.0050	mg/l	99	101	90-110	2	20
Tin	0.0098 U	0.0098	0.0200	mg/l	97	98	90-110	1	20
Titanium	0.0038 U	0.0038	0.0100	mg/l	99	101	90-113	1	20
Zirconium	0.0206 U	0.0206	0.0500	mg/l	101	102	80-120	1	20
Batch number: 111446050005A	Sample number(s): 6296055								
Antimony	0.00030 U	0.00030	0.0010	mg/l	101	98	87-110	3	20
Arsenic	0.00095 U	0.00095	0.0020	mg/l	101	108	86-111	7	20
Beryllium	0.00013 U	0.00013	0.00050	mg/l	110	107	90-112	3	20
Cadmium	0.00020 U	0.00020	0.00050	mg/l	104	105	90-114	1	20
Chromium	0.00060 U	0.00060	0.0020	mg/l	105	102	90-118	3	20
Cobalt	0.00010 U	0.00010	0.00050	mg/l	100	99	87-113	1	20
Copper	0.00038 U	0.00038	0.0020	mg/l	99	97	90-113	2	20
Lead	0.000052 U	0.00005 2	0.0010	mg/l	105	104	90-115	2	20
Nickel	0.00050 U	0.00050	0.0020	mg/l	104	105	90-113	1	20
Silver	0.000080	0.00008	0.00050	mg/l	102	104	90-115	2	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U	0							
Vanadium	0.00016 U	0.00016	0.00050	mg/l	106	102	89-116	5	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	105	105	90-116	0	20
Batch number: 111446050005B	Sample number(s): 6296055								
Selenium	0.00025 U	0.00025	0.0020	mg/l	98	101	85-114	3	20
Batch number: 111446050005C	Sample number(s): 6296055								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	102	103	89-115	1	20
Batch number: 111446050005D	Sample number(s): 6296055								
Barium	0.00053 U	0.00053	0.0020	mg/l	105	102	88-113	3	20
Batch number: 111465713002	Sample number(s): 6296055								
Mercury	0.000046 U	0.00004 6	0.00020	mg/l	97	97	80-120	1	20
Batch number: 111515708001	Sample number(s): 6296035-6296040,6296042-6296054,6296056								
Aluminum	5.03 U	5.03	20.0	mg/kg	104		61-110		
Boron	0.890 U	0.890	5.00	mg/kg	96		78-110		
Calcium	6.13 U	6.13	20.0	mg/kg	101		88-110		
Iron	4.71 U	4.71	20.0	mg/kg	106		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	105		80-120		
Magnesium	2.54 U	2.54	10.0	mg/kg	103		82-110		
Manganese	0.0780 U	0.0780	0.500	mg/kg	105		89-112		
Phosphorus	1.10 J	0.560	10.0	mg/kg	104		80-120		
Potassium	18.0 U	18.0	50.0	mg/kg	103		78-110		
Sodium	37.3 U	37.3	100	mg/kg	101		87-110		
Strontium	0.0620 U	0.0620	0.500	mg/kg	101		86-110		
Tin	1.58 J	1.00	10.0	mg/kg	103		90-114		
Titanium	0.380 U	0.380	1.00	mg/kg	120		80-120		
Zirconium	0.840 U	0.840	5.00	mg/kg	102		80-120		
Batch number: 111515711001	Sample number(s): 6296035-6296040,6296042-6296054,6296056								
Mercury	0.0029 U	0.0029	0.0997	mg/kg	91		88-123		
Batch number: 111536050004A	Sample number(s): 6296055								
Thallium	0.00015 U	0.00015	0.00050	mg/l	105	106	89-116	1	20
Batch number: 111541026001A	Sample number(s): 6296035-6296040,6296042-6296054,6296056								
Antimony	0.0600 U	0.0600	0.200	mg/kg	121		27-181		
Arsenic	0.0800 U	0.0800	0.400	mg/kg	102		83-113		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	100		86-111		
Cadmium	0.0400 U	0.0400	0.100	mg/kg	105		82-118		
Chromium	0.120 U	0.120	0.400	mg/kg	109		80-120		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	100		82-118		
Copper	0.0807 J	0.0660	0.400	mg/kg	97		83-110		
Lead	0.0104 U	0.0104	0.200	mg/kg	100		83-110		
Nickel	0.100 U	0.100	0.400	mg/kg	101		81-110		
Silver	0.0120 U	0.0120	0.100	mg/kg	102		81-111		
Thallium	0.0300 U	0.0300	0.100	mg/kg	99		83-110		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	102		84-116		
Zinc	0.560 U	0.560	3.00	mg/kg	102		81-112		
Batch number: 111541026001B	Sample number(s): 6296035-6296040,6296042-6296054,6296056								
Selenium	0.0400 U	0.0400	0.400	mg/kg	102		83-111		
Batch number: 111541026001C	Sample number(s): 6296035-6296040,6296042-6296054,6296056								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Molybdenum	0.0500 U	0.0500	0.100	mg/kg	114		78-122		
Batch number: 111541026001D	Sample number(s): 6296035-6296040,6296042-6296054,6296056								
Barium	0.108 U	0.108	0.400	mg/kg	101		81-111		
Batch number: 11143495401B	Sample number(s): 6296055								
3b Cr VI by EPA 7199	5.0 U	5.0	10.0	ug/l	103	102	90-110	1	20
Batch number: 11144196901B	Sample number(s): 6296055								
11b Anions by 300.0 - Fluoride	0.080 U	0.080	0.10	mg/l	91	91	90-110	1	20
Batch number: 11146117101B	Sample number(s): 6296055								
17b Cyanide by 9012B	0.0050 U	0.0050	0.010	mg/l	103	102	90-110	2	20
Batch number: 11151102201A	Sample number(s): 6296036,6296042-6296043,6296045-6296048,6296050,6296054								
17a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	107		80-120		
Batch number: 11151102201B	Sample number(s): 6296051								
17a Cyanide by 9012B	0.18 U	0.18	0.50	mg/kg	107		80-120		
Batch number: 11151621202A	Sample number(s): 6296035-6296040,6296042-6296045								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	98		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	98		90-110		
Batch number: 11151621202B	Sample number(s): 6296046-6296048,6296050-6296054,6296056								
11a Anions by 300.0 - Fluoride	0.80 U	0.80	1.0	mg/kg	98		90-110		
11a Anions by 300.0 - Nitrate	0.80 U	0.80	1.5	mg/kg	98		90-110		
Batch number: 11152243201A	Sample number(s): 6296035-6296040,6296042-6296048,6296050-6296054,6296056								
3a Cr VI by EPA 7199	0.20 U	0.20	1.0	mg/kg	98		80-120		
Batch number: 11153621201A	Sample number(s): 6296035-6296040,6296042-6296045								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	96		85-115		
Batch number: 11153621201B	Sample number(s): 6296046-6296048,6296050-6296054,6296056								
7a Perchlorate EPA 314.0	9.0 U	9.0	30.0	ug/kg	96		85-115		
Batch number: 11154621701A	Sample number(s): 6296055								
7b Perchlorate EPA 314.0	0.70 U	0.70	2.0	ug/l	98	99	85-115	0	20
Batch number: 11144020001A	Sample number(s): 6296055								
18b pH by 9040B					100	100	90-110	0	3
Batch number: 11145039403A	Sample number(s): 6296035-6296040,6296042-6296044								
18a pH by 9045C					100		95-105		
Batch number: 11145039403B	Sample number(s): 6296045-6296047,6296050-6296054,6296056								
18a pH by 9045C					100		95-105		
Batch number: 11153162401B	Sample number(s): 6296039-6296040,6296044,6296052-6296053,6296056								
Moisture Content by 160.3					100		80-120		
Batch number: 11160162402A	Sample number(s): 6296035-6296038,6296042-6296043,6296045-6296050								
28a Moisture Content by 160.3					100		80-120		
Moisture Content by 160.3					100		80-120		
Moisture Content by 160.3					100		80-120		
Batch number: 11160162402B	Sample number(s): 6296051,6296054								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: E111462AA	Sample number(s): 6296035-6296037,6296039 UNSPK: P298873								
1,4-Dioxane	103	111	70-130	18	30				
Batch number: 11145SLD026	Sample number(s): 6296035-6296040,6296042-6296049,6296051-6296054,6296056 UNSPK: 6296047								
Acenaphthene	95	98	75-115	3	30				
Acenaphthylene	100	102	81-110	2	30				
Aniline	73	76	35-95	3	30				
Anthracene	98	98	75-115	0	30				
Benzidine	26*	29*	35-141	12	30				
Benzo(a)anthracene	101	99	65-122	2	30				
Benzo(a)pyrene	98	101	57-126	3	30				
Benzo(b)fluoranthene	97	99	59-125	2	30				
Benzo(g,h,i)perylene	101	101	59-127	1	30				
Benzo(k)fluoranthene	96	97	56-132	1	30				
Benzoic acid	57	62	10-173	9	30				
Benzyl alcohol	109	115	67-115	6	30				
4-Bromophenyl-phenylether	89	88	67-129	2	30				
Butylbenzylphthalate	112	108	73-134	4	30				
Di-n-butylphthalate	94	95	67-123	1	30				
Carbazole	99	101	64-120	2	30				
4-Chloro-3-methylphenol	109	111*	76-110	2	30				
4-Chloroaniline	76	82	23-95	8	30				
bis(2-Chloroethoxy)methane	89	91	75-104	3	30				
bis(2-Chloroethyl)ether	87	95	60-116	8	30				
bis(2-Chloroisopropyl)ether	86	93	55-142	7	30				
2-Chloronaphthalene	142*	83	50-141	53*	30				
2-Chlorophenol	101	106	73-121	5	30				
4-Chlorophenyl-phenylether	97	100	80-109	2	30				
Chrysene	99	99	62-128	0	30				
Dibenz(a,h)anthracene	102	101	65-125	1	30				
Dibenzofuran	100	101	71-112	1	30				
1,2-Dichlorobenzene	78	89	66-108	13	30				
1,3-Dichlorobenzene	75	85	63-109	12	30				
1,4-Dichlorobenzene	77	87	70-100	11	30				
3,3'-Dichlorobenzidine	77	78	16-119	1	30				
2,4-Dichlorophenol	103	103	78-117	0	30				
Diethylphthalate	99	101	66-118	1	30				
2,4-Dimethylphenol	93	95	78-110	3	30				
3,5-Dimethylphenol	106	107	70-130	0	30				
Dimethylphthalate	96	98	64-118	2	30				
4,6-Dinitro-2-methylphenol	78	70	24-116	10	30				
2,4-Dinitrophenol	66	53	20-143	22	30				
2,4-Dinitrotoluene	108	109	73-113	1	30				
2,6-Dinitrotoluene	102	102	69-123	1	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,2-Diphenylhydrazine	93	94	71-129	1	30				
bis(2-Ethylhexyl)phthalate	113	106	63-122	6	30				
Fluoranthene	91	96	73-112	5	30				
Fluorene	101	104	77-111	3	30				
Hexachlorobenzene	93	95	77-114	1	30				
Hexachlorobutadiene	71	78	62-120	10	30				
Hexachlorocyclopentadiene	68	71	10-153	4	30				
Hexachloroethane	71	81	57-109	13	30				
Indeno(1,2,3-cd)pyrene	101	104	61-126	3	30				
Isophorone	94	96	73-102	3	30				
1-Methylnaphthalene	97	102	73-112	5	30				
2-Methylnaphthalene	91	94	76-114	3	30				
2-Methylphenol	99	105	75-111	6	30				
4-Methylphenol	108	111	71-111	3	30				
Naphthalene	88	91	72-116	3	30				
2-Nitroaniline	112	110	67-125	1	30				
3-Nitroaniline	111	112	59-122	0	30				
4-Nitroaniline	91	91	52-112	0	30				
Nitrobenzene	90	92	72-106	2	30				
2-Nitrophenol	99	97	74-115	2	30				
4-Nitrophenol	92	90	54-113	2	30				
N-Nitroso-di-n-propylamine	96	104	60-116	8	30				
N-Nitrosodimethylamine	86	88	47-116	2	30				
N-Nitrosodiphenylamine	92	94	86-145	2	30				
Di-n-octylphthalate	99	101	56-126	1	30				
Pentachlorophenol	86	84	28-127	2	30				
Phenanthrene	94	97	65-125	3	30				
Phenol	104	111	58-126	6	30				
Pyrene	110	102	74-126	8	30				
1,2,4-Trichlorobenzene	85	89	72-115	5	30				
2,4,5-Trichlorophenol	100	103	78-109	2	30				
2,4,6-Trichlorophenol	101	105	77-115	3	30				
Batch number: 11145SLF026	Sample number(s): 6296035-6296040,6296042-6296049,6296051-6296054,6296056 UNSPK: 6296047								
Acenaphthene	102	97	63-105	5	30				
Acenaphthylene	99	95	67-114	4	30				
Anthracene	105	102	60-122	3	30				
Benzo(a)anthracene	98	99	59-128	1	30				
Benzo(a)pyrene	126	125	45-138	0	30				
Benzo(b)fluoranthene	135	137	43-155	2	30				
Benzo(g,h,i)perylene	84	74	33-141	13	30				
Benzo(k)fluoranthene	129	130	42-144	1	30				
Butylbenzylphthalate	104	111	57-173	6	30				
Di-n-butylphthalate	122	117	65-148	4	30				
Chrysene	98	100	48-134	2	30				
Dibenz(a,h)anthracene	96	86	22-133	11	30				
Diethylphthalate	106	103	70-136	4	30				
Dimethylphthalate	104	101	74-118	3	30				
Bis(2-Ethylhexyl)phthalate	103	101	39-167	2	30				
Fluoranthene	112	119	26-166	6	30				
Fluorene	105	101	66-122	4	30				
Indeno(1,2,3-cd)pyrene	93	84	21-143	10	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1-Methylnaphthalene	101	94	72-123	7	30				
2-Methylnaphthalene	91	85	64-103	7	30				
Naphthalene	97	89	61-102	9	30				
N-Nitrosodimethylamine	102	96	48-113	6	30				
Di-n-octylphthalate	140	142	40-192	1	30				
Phenanthrene	103	104	12-165	0	30				
Pyrene	89	94	15-153	6	30				
Batch number: 11146SLE026	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
N-Nitrosodimethylamine	24*	24*	70-130	1	30				
Batch number: 11151B34A	Sample number(s): 6296036 UNSPK: P302747								
9a TPH by EPA 8015B Gas C5-C12	61	62	39-118	5	30				
Batch number: 111510006A	Sample number(s): 6296035-6296038,6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
4-Amino-2,6-Dinitrotoluene	113	110	80-127	3	50				
2-Amino-4,6-Dinitrotoluene	112	110	80-137	2	50				
1,3-Dinitrobenzene	116	114	38-166	2	50				
2,4-Dinitrotoluene	108	107	80-131	1	50				
2,6-Dinitrotoluene	111	109	80-127	1	50				
HMX	100	96	63-128	4	50				
Nitrobenzene	112	113	80-125	1	50				
Nitroglycerin	101	99	80-120	2	50				
2-Nitrotoluene	106	105	80-122	1	50				
3-Nitrotoluene	114	112	72-119	1	50				
4-Nitrotoluene	105	104	80-125	1	50				
PETN	127*	122*	80-121	4	50				
RDX	93	91	75-129	2	50				
Tetryl	92	80	55-174	13	50				
1,3,5-Trinitrobenzene	108	105	82-126	3	50				
2,4,6-Trinitrotoluene	112	108	82-130	3	50				
Batch number: 111520004A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
25a Formaldehyde 8315A	97	97	80-120	0	50				
Batch number: 111450020A	Sample number(s): 6296042-6296049,6296051-6296054,6296056 UNSPK: 6296047								
2,4-D	102	94	17-180	9	35				
Dalapon	58	46	10-125	24	50				
2,4-DB	62	68	10-201	9	50				
Dicamba	86	72	10-190	17	50				
Dinoseb	9*	7*	10-46	27	35				
2,4-DP (Dichlorprop)	100	87	33-178	15	50				
MCPA	89	74	10-213	18	50				
MCPP (Mecoprop)	70	78	10-184	11	50				
2,4,5-T	70	59	10-156	17	35				
2,4,5-TP	59	51	24-141	12	35				
Batch number: 111520014A	Sample number(s): 6296036,6296039-6296040,6296042,6296054 UNSPK: 6296036								
6a Perchlorate EPA 6850	103	107	80-120	3	20				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 111460034A	Sample number(s): 6296035-6296040,6296042-6296049,6296051-6296054,6296056 UNSPK: 6296047								
PCB-1016	87	109	29-146	22	50				
PCB-1260	98	109	39-149	11	50				
Batch number: 111470004A	Sample number(s): 6296042-6296049,6296051-6296054,6296056 UNSPK: 6296047								
Aldrin	39	45	16-126	14	50				
Alpha BHC	58	61	10-129	5	50				
Beta BHC	47	53	14-147	13	50				
Gamma BHC - Lindane	64	64	10-140	0	50				
p,p-DDD	51	56	16-163	8	50				
p,p-DDE	62	49	18-161	22	50				
p,p-DDT	95	134	10-176	21	50				
Delta BHC	50	53	23-140	6	50				
Dieldrin	62	47	19-154	22	50				
Endosulfan I	36	42	16-137	15	50				
Endosulfan II	31	52	28-154	52*	50				
Endosulfan Sulfate	57	57	21-160	0	50				
Endrin	48	55	11-149	12	50				
Endrin Aldehyde	39	34	10-148	17	35				
Endrin Ketone	33	43	22-165	24	50				
Heptachlor	70	76	13-126	8	50				
Heptachlor Epoxide	42	53	13-157	19	50				
Methoxychlor	72	96	32-147	28	50				
Batch number: 111480002A	Sample number(s): 6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
EFH (C12-C14)	0*	0*	49-123	0	20				
EFH (C15-C20)	40 (2)	118 (2)	49-123	15	20				
EFH (C21-C30)	-198 (2)	1919 (2)	49-123	63*	20				
EFH (C30 - C40)	-1805 (2)	3790 (2)	49-123	50*	20				
EFH (C8-C11)	0*	0*	49-123	0	20				
Batch number: 111570011A	Sample number(s): 6296036 UNSPK: P301476								
EFH (C12-C14)	0*	0*	49-123	0	20				
EFH (C15-C20)	-196 (2)	-43 (2)	49-123	26*	20				
EFH (C21-C30)	-889 (2)	-1432 (2)	49-123	31*	20				
EFH (C30 - C40)	-226 (2)	-1853 (2)	49-123	25*	20				
EFH (C8-C11)	0*	0*	49-123	0	20				
Batch number: 111450001A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
Diethylene glycol	40*	39*	59-109	4	20				
Ethylene glycol	60*	60*	63-107	1	20				
Propylene glycol	68	68	63-107	0	20				
Batch number: 111450035A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
Ethanol	66	64	48-130	2	20				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Isopropanol	71	71	12-149	1	20				
Methanol	71	69	43-138	2	20				
Batch number: 111510027A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
m-Terphenyl	82	80	75-125	2	20				
o-Terphenyl	98	95	75-125	4	20				
p-Terphenyl	94	93	75-125	1	20				
Batch number: 111515708001	Sample number(s): 6296035-6296040,6296042-6296054,6296056 UNSPK: 6296047 BKG: 6296047								
Aluminum	1488 (2)	2387 (2)	75-125	6	20	26,300	26,700	2	20
Boron	99	99	84-115	2	20	2.45 J	1.62 J	41* (1)	20
Calcium	-2319 (2)	-1985 (2)	75-125	15	20	16,100	7,380	74*	20
Iron	677 (2)	-340 (2)	75-125	4	20	27,900	27,800	0	20
Lithium	101	103	82-114	4	20	22.7	23.2	2	20
Magnesium	222 (2)	309 (2)	75-125	3	20	5,790	6,030	4	20
Manganese	138 (2)	29 (2)	75-125	12	20	393	379	4	20
Phosphorus	128*	89	75-125	8	20	311	300	4	20
Potassium	161*	154*	75-125	1	20	3,830	3,840	0	20
Sodium	98	98	75-125	1	20	124	122	2 (1)	20
Strontium	93	94	75-115	2	20	36.4	34.3	6	20
Tin	88	87	80-110	1	20	2.80 J	2.75 J	2 (1)	20
Titanium	215 (2)	285 (2)	75-125	4	20	1,450	1,410	3	20
Zirconium	94	94	75-125	2	20	6.08	5.92	3 (1)	20
Batch number: 111515711001	Sample number(s): 6296035-6296040,6296042-6296054,6296056 UNSPK: 6296047 BKG: 6296047								
Mercury	102	90	65-135	7	20	0.0403 J	0.0135 J	100* (1)	20
Batch number: 111541026001A	Sample number(s): 6296035-6296040,6296042-6296054,6296056 UNSPK: 6296047 BKG: 6296047								
Antimony	60*	74*	75-125	14	20	0.445	0.258	53* (1)	20
Arsenic	89	143*	75-125	11	20	7.11	5.29	29*	20
Beryllium	97	122	75-125	11	20	0.875	0.676	26*	20
Cadmium	103	135*	75-125	18	20	0.633	0.325	64* (1)	20
Chromium	100	85	75-125	4	20	26.2	24.7	6	20
Cobalt	91	90	75-125	0	20	11.3	8.28	31*	20
Copper	102	144*	75-125	13	20	19.8	14.9	28*	20
Lead	121 (2)	249 (2)	75-125	16	20	17.4	15.0	15	20
Nickel	158*	145*	75-125	3	20	25.1	17.9	34*	20
Silver	126*	145*	75-125	14	20	0.0620 J	0.118	63* (1)	20
Thallium	107	150*	75-125	18	20	0.428	0.293	37* (1)	20
Vanadium	118 (2)	230 (2)	75-125	11	20	79.6	58.7	30*	20
Zinc	325 (2)	140 (2)	75-125	11	20	141	133	6	20
Batch number: 111541026001B	Sample number(s): 6296035-6296040,6296042-6296054,6296056 UNSPK: 6296047 BKG: 6296047								
Selenium	109	122	75-125	10	20	0.202 J	0.121 J	50* (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
Batch number: 111541026001C	Sample number(s): 6296035-6296040,6296042-6296054,6296056 UNSPK: 6296047 BKG: 6296047										
Molybdenum	122	141*	75-125	13	20	1.31		0.990		28*	20
Batch number: 111541026001D	Sample number(s): 6296035-6296040,6296042-6296054,6296056 UNSPK: 6296047 BKG: 6296047										
Barium	31 (2)	-349 (2)	75-125	24*	20	173		121		35*	20
Batch number: 11151102201A	Sample number(s): 6296036,6296042-6296043,6296045-6296048,6296050,6296054 UNSPK: 6296047 BKG: 6296047										
17a Cyanide by 9012B	106		75-125			0.17	U	0.18	U	0 (1)	20
Batch number: 11151102201B	Sample number(s): 6296051 UNSPK: 6296051 BKG: 6296051										
17a Cyanide by 9012B	106		75-125			0.18	U	0.18	U	0 (1)	20
Batch number: 11151621202A	Sample number(s): 6296035-6296040,6296042-6296045 UNSPK: 6296035 BKG: 6296035										
11a Anions by 300.0 - Fluoride	94		80-120			5.3		6.4		19	20
11a Anions by 300.0 - Nitrate	101		80-120			0.81	J	1.0	J	22* (1)	20
Batch number: 11151621202B	Sample number(s): 6296046-6296048,6296050-6296054,6296056 UNSPK: 6296047 BKG: 6296047										
11a Anions by 300.0 - Fluoride	55*		80-120			4.1		4.0		2 (1)	20
11a Anions by 300.0 - Nitrate	92		80-120			1.4	J	1.0	J	30* (1)	20
Batch number: 11152243201A	Sample number(s): 6296035-6296040,6296042-6296048,6296050-6296054,6296056 UNSPK: 6296047 BKG: 6296047										
3a Cr VI by EPA 7199	98		75-125			0.64	J	0.77	J	18 (1)	20
Batch number: 11153621201A	Sample number(s): 6296035-6296040,6296042-6296045 UNSPK: 6296035 BKG: 6296035										
7a Perchlorate EPA 314.0	116		80-120			9.0	U	9.0	U	0 (1)	15
Batch number: 11153621201B	Sample number(s): 6296046-6296048,6296050-6296054,6296056 UNSPK: 6296047 BKG: 6296047										
7a Perchlorate EPA 314.0	118		80-120			9.0	U	9.0	U	0 (1)	15
Batch number: 11145039403A	Sample number(s): 6296035-6296040,6296042-6296044 BKG: 6296035										
18a pH by 9045C						8.34		8.34		0	3
Batch number: 11145039403B	Sample number(s): 6296045-6296047,6296050-6296054,6296056 BKG: 6296047										
18a pH by 9045C						8.04		8.00		0	3
Batch number: 11153162401B	Sample number(s): 6296039-6296040,6296044,6296052-6296053,6296056 BKG: 6296040										
Moisture Content by 160.3						13.1		13.8		6	20
Batch number: 11160162402A	Sample number(s): 6296035-6296038,6296042-6296043,6296045-6296050 BKG: 6296047										
28a Moisture Content by 160.3						12.9		12.9		0	20
Moisture Content by 160.3						12.9		12.9		0	20
Moisture Content by 160.3						12.9		12.9		0	20
Batch number: 11160162402B	Sample number(s): 6296051,6296054 BKG: P301476										
Moisture Content by 160.3						9.5		9.8		2	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 1a Volatile Organics EPA 8260B
Batch number: B111471AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6296035	100	97	99	95
6296036	103	106	98	97
6296037	103	106	98	97
6296039	102	102	99	95
Blank	101	102	100	96
LCS	102	102	102	101
LCSD	100	100	102	100
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 14b 1,4-Dioxane by 8260B SIM
Batch number: E111461AA

	Toluene-d8
6296041	106
Blank	106
LCS	106
LCSD	106
Limits:	80-120

Analysis Name: 14a 1,4-Dioxane by 8260B SIM
Batch number: E111462AA

	Toluene-d8
6296035	97
6296036	97
6296037	97
6296039	97
Blank	98
LCS	98
LCSD	98
MS	93
MSD	95
Limits:	70-130

Analysis Name: 1b Volatile Organics EPA8260
Batch number: L111471AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6296041	102	102	101	98
Blank	103	101	101	99
LCS	103	102	102	100
LCSD	102	102	103	101
Limits:	86-118	80-120	88-110	86-115

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Surrogate Quality Control

Analysis Name: 15b NDMA by 1625C
Batch number: 11144WAA026

	N-Nitrosodimethylamine-d6
6296055	106
Blank	97
LCS	96
LCSD	109
Limits:	50-150

Analysis Name: 4b Select SVOC EPA 8270SIM
Batch number: 11144WAK026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6296055	100	95	103
Blank	93	91	89
LCS	106	94	97
LCSD	108	101	103
Limits:	40-130	45-130	45-135

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 11145SLD026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6296035	94	90	95	84	81	88
6296036	94	90	99	83	81	89
6296037	96	93	96	83	83	88
6296038	87	84	93	76	75	81
6296039	92	90	87	77	74	81
6296040	98	92	96	80	80	91
6296042	85	85	87	79	84	73
6296043	95	92	92	88	89	84
6296044	80	79	85	77	82	73
6296045	91	87	96	85	91	83
6296046	91	88	92	85	90	82
6296047	96	92	104	81	81	88
6296048	101	94	104	85	83	90
6296049	103	95	104	86	84	86
6296051	92	86	93	86	90	77
6296052	92	86	95	86	89	80
6296053	76	74	83	75	78	74
6296054	92	88	93	87	89	79
6296056	87	85	90	84	88	74
Blank	91	90	101	84	84	76
LCS	90	86	91	74	69	72
MS	101	94	104	85	83	90
MSD	103	95	104	86	84	86
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 11145SLF026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Surrogate Quality Control

6296035	90	88	102
6296036	95	91	107
6296037	94	89	102
6296038	93	90	105
6296039	96	90	104
6296040	84	90	101
6296042	93	94	96
6296043	91	91	94
6296044	96	93	93
6296045	97	96	96
6296046	104	100	101
6296047	103	100	105
6296048	115	103	100
6296049	109	99	98
6296051	102	99	103
6296052	100	97	101
6296053	97	95	96
6296054	89	86	90
6296056	81	76	84
Blank	103	103	108
LCS	109	100	103
MS	115	103	100
MSD	109	99	98
Limits:	40-130	45-130	45-135

Analysis Name: 15a NDMA by 1625C
Batch number: 11146SLE026

	N-Nitrosodimethylamine-d6
6296036	67
6296042	94
6296043	129
6296045	90
6296046	91
6296047	152*
6296048	164*
6296049	143
6296051	160*
6296054	145
Blank	91
LCS	104
MS	164*
MSD	143
Limits:	50-150

Analysis Name: 5b Semivolatiles by EPA 8270C
Batch number: 11146WAD026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6296055	50	31	98	86	88	85
Blank	59	36	96	91	88	84
LCS	62	40	94	86	88	84
LCSD	60	39	92	86	87	85

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Surrogate Quality Control

Limits:	20-130	20-120	30-130	40-130	45-130	45-135

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12
Batch number: 11151A20A

	Trifluorotoluene-F
6296041	70
Blank	70
LCS	112
LCSD	108

Limits:	63-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 11151B34A

	Trifluorotoluene-F
6296036	71
Blank	76
LCS	79
LCSD	87
MS	74
MSD	74

Limits:	61-122

Analysis Name: 25b Formaldehyde 8315A
Batch number: 111440027A

	Butyraldehyde
6296055	62
Blank	65
LCS	62
LCSD	64

Limits:	45-145

Analysis Name: 13b Herbicides by EPA 8151
Batch number: 111450014A

	2,4-Dichlorophenylacetic acid
6296055	90
Blank	92
LCS	109
LCSD	106

Limits:	35-144

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 111450020A

	2,4-Dichlorophenylacetic acid
6296042	87
6296043	87

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Surrogate Quality Control

6296044	89
6296045	99
6296046	84
6296047	89
6296048	100
6296049	95
6296051	81
6296052	94
6296053	104
6296054	93
6296056	295*
Blank	79
LCS	83
MS	100
MSD	95
Limits:	36-156

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 111460034A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6296035	104	94
6296036	105	94
6296037	100	96
6296038	97	90
6296039	107	100
6296040	107	79
6296042	82	82
6296043	99	94
6296044	107	105
6296045	112	93
6296046	105	78
6296047	108	88
6296048	106	85
6296049	98	82
6296051	103	88
6296052	101	86
6296053	121	105
6296054	113	90
6296056	68	55
Blank	121	107
LCS	120	109
MS	106	85
MSD	98	82
Limits:	53-139	45-120

Analysis Name: 12b Pesticides by 8081A
Batch number: 111460040A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6296055	94	58
Blank	100	88
LCS	98	107
LCSD	102	99
Limits:	52-141	40-144

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Surrogate Quality Control

Analysis Name: 8b PCBs/PCTs by 8082
Batch number: 111460041A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6296055	112	55
Blank	116	86
LCS	119	70
LCSD	116	97
Limits:	30-150	30-150

Analysis Name: 12a Pesticides by 8081A
Batch number: 111470004A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6296042	97	79
6296043	79	119
6296044	79	178*
6296045	81	93
6296046	62	55
6296047	53	67
6296048	50	83
6296049	57	102
6296051	67	61
6296052	74	79
6296053	61	93
6296054	75	67
6296056	22*	119
Blank	34*	42
LCS	82	103
MS	50	44
MSD	57	56
Limits:	50-130	20-120

Analysis Name: 16a Energetics by 8330A
Batch number: 111510006A

	2-Nitro-m-xylene
6296035	133
6296036	127
6296037	132
6296038	124
6296042	123
6296043	118
6296045	120
6296046	129
6296047	125
6296048	126
6296049	122
6296051	123
6296054	123
Blank	119
LCS	126
LCSD	123
MS	126

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Surrogate Quality Control

MSD	122
Limits:	80-146

Analysis Name: 25a Formaldehyde 8315A
Batch number: 111520004A

	Butyraldehyde
6296036	118
6296042	128*
6296043	130*
6296045	122
6296046	124
6296047	101
6296048	103
6296049	105
6296051	125
6296054	130*
Blank	83
LCS	100
MS	103
MSD	105
Limits:	64-126

Analysis Name: 16b Energetics by 8330A
Batch number: 111580002A

	2-Nitro-m-xylene
6296055	110
Blank	106
LCS	104
LCSD	107
Limits:	50-134

Analysis Name: 21a Glycols by 8015B
Batch number: 111450001A

	Tetramethylene glycol
6296036	84
6296042	90
6296043	93
6296045	89
6296046	87
6296047	86
6296048	86
6296049	85
6296051	83
6296054	81
Blank	90
LCS	98
MS	86
MSD	85
Limits:	29-137

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Surrogate Quality Control

Analysis Name: 20b Terphenyls by 8015B
Batch number: 111450009A

	n-Triacontane-d62
6296055	27*
Blank	84
LCS	83
LCSD	80
Limits:	50-150

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel
Batch number: 111450031A

	Chlorobenzene	Orthoterphenyl
6296055	74	86
Blank	101	95
LCS	92	100
LCSD	84	94
Limits:	28-152	52-131

Analysis Name: 19a Alcohols by 8015B
Batch number: 111450035A

	Acetone
6296036	73
6296042	70
6296043	72
6296045	69
6296046	70
6296047	70
6296048	74
6296049	76
6296051	68
6296054	68
Blank	87
LCS	86
MS	74
MSD	76
Limits:	42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 111480002A

	Chlorobenzene	Orthoterphenyl
6296042	86	106
6296043	87	101
6296045	74	100
6296046	56	81
6296047	85	98
6296048	81	93
6296049	97	107
6296051	55	89
6296054	70	114
Blank	83	94

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 06/20/11 at 09:34 AM

Surrogate Quality Control

LCS	86	97
MS	81	93
MSD	97	107
Limits:	37-125	47-145

Analysis Name: 20a Terphenyls by 8015B
Batch number: 111510027A

	n-Triacontane-d62
6296036	92
6296042	110
6296043	159*
6296045	97
6296046	94
6296047	117
6296048	151*
6296049	130
6296051	77
6296054	108
Blank	92
LCS	94
MS	151*
MSD	130
Limits:	50-150

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 111570011A

	Chlorobenzene	Orthoterphenyl
6296036	72	89
Blank	77	93
LCS	89	95
MS	91	113
MSD	86	103
Limits:	37-125	47-145

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM	SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS									VOCs			SECONDARY FOR ALL LOCATIONS									Other Instructions and Notes
NOTES: * Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels $ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected						*Metals EPA 6010/6020/7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6850 (10%)	VOCs/EPA 8260B $	1,4-Dioxane EPA 8260SIM $	TPH-GRO EPA 8015B $	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**ANDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	
Samplers Signatures:																											
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																						
SL-084-SA5DN-SB-4.5	5/23/11	0925	SOIL	NONE	4-Encores										X	X											
SL-084-SA5DN-SB-4.0-5.0	5/23/11	0930	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X					
SL-089-SA5DN-SB-4.5	5/23/11	1020	SOIL	NONE	5-Encores										X	X	X										
SL-089-SA5DN-SB-4.0-5.0	5/23/11	1025	SOIL	NONE	4-16 oz jars	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-081-SA5DN-SB-4.5	5/23/11	1300	SOIL	NONE	5-Encores										X	X											
SL-081-SA5DN-SB-4.0-5.0	5/23/11	1310	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X					
SL-081-SA5DN-SB-9.0-10.0	5/23/11	1315	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X					
SL-075-SA5DN-SB-4.5	5/23/11	1535	SOIL	NONE	4-Encores										X	X											
SL-075-SA5DN-SB-4.0-5.0	5/23/11	1540	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X													
SL-075-SA5DN-SB-9.0-10.0	5/23/11	1545	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X													
TB-052311	5/23/11	0600	WATER	HCl	4-40 mL VOA VIALS										X	X	X										TRIP BLANK
Relinquished by: (Signature)	Date/Time 05/23/2011 / 1700		Received for Laboratory by: (Signature)																								Laboratory: Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time 5/24/11 1010		Airbill No.(s) 8695 1441 7961, 7994, 8008,7972, 7983																								

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected

Samplers Signatures: T Pham

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020/SW7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCTs EPA 8082	*Chlorin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6850 (10%)	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**N-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Tephenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	1-SS sleeve			X	X																	
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	1-SS sleeve			X	X																	
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-16 oz jars	X	X	X	X	X	X	X	X		X	X										
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-SS sleeve			X	X																	
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	1-SS sleeve			X	X																	
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	1-SS sleeve			X	X																	
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	4-16 oz jar	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	MS/MSD
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	2-SS sleeve			X	X																	MS/MSD
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	1-SS sleeve			X	X																	
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-16 oz jars	X	X	X	X	X	X	X	X		X	X										
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-SS sleeve			X	X																	
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-16 oz jars	X	X	X	X	X	X	X	X		X	X										
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-SS sleeve			X	X																	
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	1-SS sleeve			X	X																	

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Laboratory:
	05/23/2011 / 1700		Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time	Airbill No.(s)	
	5/24/11 0900	8695 1441 7961, 7994, 8008,7972, 7983	

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
§ Moisture by EPA 160.3 will be performed on soil in 16 oz jar collected from the same interval from which Encores were collected

Samplers Signatures: TPM

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020/6/7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCDs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*1M EPA 9045C/9040B	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	12-1 liter ambers			X	X	X				X	X	X			X	X		X			
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NaOH	1-500 mL glass																X				
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	1-250 mL glass													X							
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	1-500 mL poly		X				X	X	X												
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	HNO3	1-500 mL poly	X																			
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	HCl	2-40 mL vial																			X	
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	4-40 mL vial												X						X		

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Other Instructions and Notes
	05/23/2011 / 1700		Laboratory: Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time	Airbill No.(s)	
	Sheila Lopez	8695 1441 7961, 7994, 8008, 7972, 7983	

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected

Samplers Signatures:

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020/7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Chromium EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Methyl Mercury EPA Method 1630	**Organotin NOAA Status&Trends	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Tetraphyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Poly											X									
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Jars												X								
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	3-16 oz. Jars	X	X	X	X	X	X	X	X	X	X										
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Poly											X									
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Jars												X								
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber											X									
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber												X								

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Laboratory:
	05/23/2011 / 1700		Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time	Airbill No.(s)	
	5/24/2011	8695 1441 7961, 7994, 8008,7972, 7983	

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdm.com]
Sent: Tuesday, May 24, 2011 2:44 PM
To: Nicole Maljovec
Cc: Bloisa, Peggy
Subject: Corrections for SSFL COC 5.23.11

Attachments: COC_05_23_11_sediment(1).xlsx



COC_05_23_11_sediment(1).xlsx ...

Hi Nicole

Now that the dust has settled, Peggy and I have found my mistakes from yesterday. I have attached new updated COCs. I have highlighted the changes in red or yellow. These include:

1) SED-035-SIV-SD on the first two lines of the "Sediment Hole" COC should be SED-035-SIV-SDMS. The are the MS/MSD sample.

2) DUP01-SIV-SD should be DUP03-SIV-QC-052311

3) FB07-SIV-SS-052311 should be FB08-SIV-052311

4) For the COC starting with the sample name SL-015-SA5DN-SS-0.0-0.5, SVOCs and PCBs should only be analyzed from the sleeves and not from the jars.

5) The 6-40mL vials for the equipment blank will ship today.

Thank you !!

13013 1248215 G296035-5C

CHAIN OF CUSTODY RECORD

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected

Samplers Signatures:

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020B&7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6850 (10%)	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8016B	Other Instructions and Notes
						PRIMARY FOR ALL LOCATIONS									SS ONLY		SECONDARY FOR ALL LOCATIONS										Amended COC
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	1-SS sleeve			X	X																	
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	1-SS sleeve			X	X																	
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-16 oz jars	X	X			X	X	X	X		X	X										
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-SS sleeve			X	X																	
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	1-SS sleeve			X	X																	
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	1-SS sleeve			X	X																	
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	4-16 oz jar	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	MS/MSD
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	2-SS sleeve			X	X																	MS/MSD
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	1-SS sleeve			X	X																	
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-16 oz jars	X	X			X	X	X	X		X	X										
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-SS sleeve			X	X																	
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-16 oz jars	X	X			X	X	X	X		X	X										
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-SS sleeve			X	X																	
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	1-SS sleeve			X	X																	

Relinquished by: (*Signature*)	Date/Time	Received for Laboratory by: (*Signature*)	Laboratory:
	05/23/2011 / 1700		Lancaster Laboratories, Inc.
Received by: (*Signature*)	**Date/Time**	**Airbill No.(s)**	
		8695 1441 7961, 7994, 8008,7972, 7983	

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

June 12, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 05/24/2011
Group Number: 1248219
SDG: DX087
PO Number: 1203-004-008-AL
Release Number: TRACKING #12090
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-084-SA5DN-SB-4.0-5.0 Soil	6296078
SL-089-SA5DN-SB-4.0-5.0 Soil	6296079
SL-081-SA5DN-SB-4.0-5.0 Soil	6296080
SL-081-SA5DN-SB-9.0-10.0 Soil	6296081
SL-075-SA5DN-SB-4.0-5.0 Soil	6296082
SL-075-SA5DN-SB-9.0-10.0 Soil	6296083
SL-015-SA5DN-SS-0.0-0.5 Soil	6296084
SL-016-SA5DN-SS-0.0-0.5 Soil	6296085
SL-017-SA5DN-SS-0.0-0.5 Soil	6296086
SL-019-SA5DN-SS-0.0-0.5 Soil	6296087
SL-021-SA5DN-SS-0.0-0.5 Soil	6296088
SL-022-SA5DN-SS-0.0-0.5 Soil	6296089
SL-022-SA5DN-SS-0.0-0.5MS Soil	6296090
SL-022-SA5DN-SS-0.0-0.5MSD Soil	6296091
SL-023-SA5DN-SS-0.0-0.5 Soil	6296092
SL-052-SA5DN-SS-0.0-0.5 Soil	6296093
SL-053-SA5DN-SS-0.0-0.5 Soil	6296094
DUP05-SA5DN-QC-052311 Soil	6296095
EB05-SA5DN-SS-052311 Water	6296096
SED-035-SIV-SD Sediment	6296097

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ELECTRONIC COPY TO CDM Federal Services Program Attn: Todd Burgesser

ELECTRONIC COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,



Michele J. Smith
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296078
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0844 SDG#: DX087-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	9.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296078
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0844 SDG#: DX087-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0287 JQ	0.0197	1.10	1
11031	12378-PeCDD	40321-76-4	0.0421 JBQ	0.0200	5.48	1
11031	123478-HxCDD	39227-28-6	0.0588 JB	0.0196	5.48	1
11031	123678-HxCDD	57653-85-7	0.102 JB	0.0198	5.48	1
11031	123789-HxCDD	19408-74-3	0.0783 JBQ	0.0191	5.48	1
11031	1234678-HpCDD	35822-46-9	1.10 JB	0.0381	5.48	1
11031	OCDD	3268-87-9	15.6 B	0.0404	11.0	1
11031	2378-TCDF	51207-31-9	0.0187 U	0.0187	1.10	1
11031	12378-PeCDF	57117-41-6	0.0433 JBQ	0.0101	5.48	1
11031	23478-PeCDF	57117-31-4	0.0847 JBQ	0.00940	5.48	1
11031	123478-HxCDF	70648-26-9	0.0686 JBQ	0.0175	5.48	1
11031	123678-HxCDF	57117-44-9	0.0586 JBQ	0.0163	5.48	1
11031	123789-HxCDF	72918-21-9	0.0885 JBQ	0.0152	5.48	1
11031	234678-HxCDF	60851-34-5	0.0973 JB	0.0131	5.48	1
11031	1234678-HpCDF	67562-39-4	0.293 JBQ	0.0178	5.48	1
11031	1234789-HpCDF	55673-89-7	0.0709 JBQ	0.0235	5.48	1
11031	OCDF	39001-02-0	0.451 JB	0.0403	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	75	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	57	26 - 152
13C12-123678-HxCDF	61	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	70	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	81	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-084-SA5DN-SB-4.0-5.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296078
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0844 SDG#: DX087-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296078
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0844 SDG#: DX087-01

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 14:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296079
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0894 SDG#: DX087-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	9.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296079
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0894 SDG#: DX087-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0257 U	0.0257	1.10	1
11031	12378-PeCDD	40321-76-4	0.0221 JBQ	0.0207	5.48	1
11031	123478-HxCDD	39227-28-6	0.0244 JBQ	0.0187	5.48	1
11031	123678-HxCDD	57653-85-7	0.0757 JBQ	0.0197	5.48	1
11031	123789-HxCDD	19408-74-3	0.0955 JBQ	0.0178	5.48	1
11031	1234678-HpCDD	35822-46-9	0.786 JB	0.0366	5.48	1
11031	OCDD	3268-87-9	13.5 B	0.0348	11.0	1
11031	2378-TCDF	51207-31-9	0.0211 U	0.0211	1.10	1
11031	12378-PeCDF	57117-41-6	0.0481 JBQ	0.0121	5.48	1
11031	23478-PeCDF	57117-31-4	0.0880 JB	0.0111	5.48	1
11031	123478-HxCDF	70648-26-9	0.0739 JBQ	0.0154	5.48	1
11031	123678-HxCDF	57117-44-9	0.0602 JBQ	0.0144	5.48	1
11031	123789-HxCDF	72918-21-9	0.0669 JB	0.0168	5.48	1
11031	234678-HxCDF	60851-34-5	0.0685 JBQ	0.0131	5.48	1
11031	1234678-HpCDF	67562-39-4	0.221 JBQ	0.0132	5.48	1
11031	1234789-HpCDF	55673-89-7	0.0785 JB	0.0171	5.48	1
11031	OCDF	39001-02-0	0.330 JBQ	0.0343	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	60	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	70	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	65	17 - 157
13C12-2378-TCDF	58	24 - 169
13C12-12378-PeCDF	63	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	61	26 - 152
13C12-123678-HxCDF	64	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	68	28 - 143
13C12-1234789-HpCDF	64	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296079
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0894 SDG#: DX087-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296079
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0894 SDG#: DX087-02

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 15:41	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296080
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0814 SDG#: DX087-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	9.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296080
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0814 SDG#: DX087-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		**ng/kg**	**ng/kg**	**ng/kg**	
11031	2378-TCDD	1746-01-6	0.0264 U	0.0264	1.10	1
11031	12378-PeCDD	40321-76-4	0.0630 JBQ	0.0209	5.51	1
11031	123478-HxCDD	39227-28-6	0.0225 JBQ	0.0209	5.51	1
11031	123678-HxCDD	57653-85-7	0.0756 JBQ	0.0219	5.51	1
11031	123789-HxCDD	19408-74-3	0.134 JBQ	0.0206	5.51	1
11031	1234678-HpCDD	35822-46-9	0.678 JB	0.0383	5.51	1
11031	OCDD	3268-87-9	5.37 JB	0.0434	11.0	1
11031	2378-TCDF	51207-31-9	0.0222 U	0.0222	1.10	1
11031	12378-PeCDF	57117-41-6	0.0541 JBQ	0.0122	5.51	1
11031	23478-PeCDF	57117-31-4	0.0941 JB	0.0114	5.51	1
11031	123478-HxCDF	70648-26-9	0.0476 JBQ	0.0161	5.51	1
11031	123678-HxCDF	57117-44-9	0.0376 JB	0.0154	5.51	1
11031	123789-HxCDF	72918-21-9	0.121 JB	0.0166	5.51	1
11031	234678-HxCDF	60851-34-5	0.0856 JB	0.0141	5.51	1
11031	1234678-HpCDF	67562-39-4	0.211 JB	0.0143	5.51	1
11031	1234789-HpCDF	55673-89-7	0.0778 JB	0.0180	5.51	1
11031	OCDF	39001-02-0	0.341 JBQ	0.0373	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	62	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	64	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	60	26 - 152
13C12-123678-HxCDF	63	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	67	29 - 147
13C12-1234678-HpCDF	65	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-081-SA5DN-SB-4.0-5.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296080
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0814 SDG#: DX087-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296080
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0814 SDG#: DX087-03

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 16:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296081
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0819 SDG#: DX087-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	8.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296081
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0819 SDG#: DX087-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0346 JQ	0.0205	1.09	1
11031	12378-PeCDD	40321-76-4	0.0393 JBQ	0.0226	5.44	1
11031	123478-HxCDD	39227-28-6	0.0584 JBQ	0.0176	5.44	1
11031	123678-HxCDD	57653-85-7	0.0621 JBQ	0.0183	5.44	1
11031	123789-HxCDD	19408-74-3	0.0992 JB	0.0178	5.44	1
11031	1234678-HpCDD	35822-46-9	0.860 JB	0.0380	5.44	1
11031	OCDD	3268-87-9	8.17 JB	0.0400	10.9	1
11031	2378-TCDF	51207-31-9	0.0196 U	0.0196	1.09	1
11031	12378-PeCDF	57117-41-6	0.0391 JBQ	0.0103	5.44	1
11031	23478-PeCDF	57117-31-4	0.0836 JBQ	0.00973	5.44	1
11031	123478-HxCDF	70648-26-9	0.0690 JB	0.0143	5.44	1
11031	123678-HxCDF	57117-44-9	0.0474 JBQ	0.0139	5.44	1
11031	123789-HxCDF	72918-21-9	0.0578 JBQ	0.0156	5.44	1
11031	234678-HxCDF	60851-34-5	0.0702 JB	0.0137	5.44	1
11031	1234678-HpCDF	67562-39-4	0.253 JB	0.0133	5.44	1
11031	1234789-HpCDF	55673-89-7	0.0811 JBQ	0.0175	5.44	1
11031	OCDF	39001-02-0	0.330 JB	0.0341	10.9	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	62	25 - 164
13C12-12378-PeCDD	67	25 - 181
13C12-123478-HxCDD	71	32 - 141
13C12-123678-HxCDD	71	28 - 130
13C12-123789-HxCDD	71	28 - 130
13C12-1234678-HpCDD	70	23 - 140
13C12-OCDD	68	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	65	21 - 178
13C12-123478-HxCDF	67	26 - 152
13C12-123678-HxCDF	69	26 - 123
13C12-234678-HxCDF	70	28 - 136
13C12-123789-HxCDF	70	29 - 147
13C12-1234678-HpCDF	71	28 - 143
13C12-1234789-HpCDF	67	26 - 138
13C12-OCDF	64	17 - 157
13C12-1278-TCDD (CRS)	75	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-081-SA5DN-SB-9.0-10.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296081
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0819 SDG#: DX087-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296081
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0819 SDG#: DX087-04

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 17:34	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296082
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0754 SDG#: DX087-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	13.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296082
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0754 SDG#: DX087-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0208	U	0.0208	1.11	1
11031	12378-PeCDD	40321-76-4	0.0231	U	0.0231	5.53	1
11031	123478-HxCDD	39227-28-6	0.0180	U	0.0180	5.53	1
11031	123678-HxCDD	57653-85-7	0.0634	JBQ	0.0187	5.53	1
11031	123789-HxCDD	19408-74-3	0.0804	JBQ	0.0162	5.53	1
11031	1234678-HpCDD	35822-46-9	0.425	JBQ	0.0299	5.53	1
11031	OCDD	3268-87-9	3.62	JB	0.0385	11.1	1
11031	2378-TCDF	51207-31-9	0.0188	U	0.0188	1.11	1
11031	12378-PeCDF	57117-41-6	0.0336	JBQ	0.0105	5.53	1
11031	23478-PeCDF	57117-31-4	0.0655	JBQ	0.00993	5.53	1
11031	123478-HxCDF	70648-26-9	0.0789	JB	0.0232	5.53	1
11031	123678-HxCDF	57117-44-9	0.0612	JB	0.0197	5.53	1
11031	123789-HxCDF	72918-21-9	0.0488	JB	0.0144	5.53	1
11031	234678-HxCDF	60851-34-5	0.0790	JB	0.0119	5.53	1
11031	1234678-HpCDF	67562-39-4	0.246	JBQ	0.0188	5.53	1
11031	1234789-HpCDF	55673-89-7	0.0287	JB	0.0195	5.53	1
11031	OCDF	39001-02-0	0.184	JB	0.0335	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	65	32 - 141
13C12-123678-HxCDD	63	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	60	24 - 169
13C12-12378-PeCDF	66	24 - 185
13C12-23478-PeCDF	64	21 - 178
13C12-123478-HxCDF	36	26 - 152
13C12-123678-HxCDF	41	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	50	28 - 143
13C12-1234789-HpCDF	59	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-075-SA5DN-SB-4.0-5.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296082
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0754 SDG#: DX087-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296082
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0754 SDG#: DX087-05

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 18:31	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296083
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0759 SDG#: DX087-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	13.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296083
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0759 SDG#: DX087-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0743	JQ	0.0207	1.14	1
11031	12378-PeCDD	40321-76-4	0.200	JB	0.0241	5.68	1
11031	123478-HxCDD	39227-28-6	0.160	JB	0.0242	5.68	1
11031	123678-HxCDD	57653-85-7	0.186	JBQ	0.0255	5.68	1
11031	123789-HxCDD	19408-74-3	0.173	JBQ	0.0227	5.68	1
11031	1234678-HpCDD	35822-46-9	1.22	JBQ	0.0413	5.68	1
11031	OCDD	3268-87-9	13.4	B	0.0406	11.4	1
11031	2378-TCDF	51207-31-9	0.0745	JBQ	0.0183	1.14	1
11031	12378-PeCDF	57117-41-6	0.255	JBQ	0.0128	5.68	1
11031	23478-PeCDF	57117-31-4	0.247	JBQ	0.0115	5.68	1
11031	123478-HxCDF	70648-26-9	0.219	JB	0.0252	5.68	1
11031	123678-HxCDF	57117-44-9	0.219	JB	0.0226	5.68	1
11031	123789-HxCDF	72918-21-9	0.174	JBQ	0.0219	5.68	1
11031	234678-HxCDF	60851-34-5	0.185	JBQ	0.0188	5.68	1
11031	1234678-HpCDF	67562-39-4	0.399	JB	0.0235	5.68	1
11031	1234789-HpCDF	55673-89-7	0.0908	JBQ	0.0274	5.68	1
11031	OCDF	39001-02-0	0.545	JBQ	0.0399	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	56	25 - 164
13C12-12378-PeCDD	56	25 - 181
13C12-123478-HxCDD	54	32 - 141
13C12-123678-HxCDD	53	28 - 130
13C12-123789-HxCDD	57	28 - 130
13C12-1234678-HpCDD	57	23 - 140
13C12-OCDD	52	17 - 157
13C12-2378-TCDF	55	24 - 169
13C12-12378-PeCDF	55	24 - 185
13C12-23478-PeCDF	55	21 - 178
13C12-123478-HxCDF	42	26 - 152
13C12-123678-HxCDF	45	26 - 123
13C12-234678-HxCDF	56	28 - 136
13C12-123789-HxCDF	57	29 - 147
13C12-1234678-HpCDF	48	28 - 143
13C12-1234789-HpCDF	51	26 - 138
13C12-OCDF	44	17 - 157
13C12-1278-TCDD (CRS)	60	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-075-SA5DN-SB-9.0-10.0 Soil**
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296083
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0759 SDG#: DX087-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296083
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

D0759 SDG#: DX087-06

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 19:27	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296084
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD015 SDG#: DX087-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	12.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296084
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD015 SDG#: DX087-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg	ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.109 J	0.0215	1.11	1
11031	12378-PeCDD	40321-76-4	0.760 JBQ	0.0496	5.54	1
11031	123478-HxCDD	39227-28-6	2.39 JB	0.104	5.54	1
11031	123678-HxCDD	57653-85-7	14.6 B	0.110	5.54	1
11031	123789-HxCDD	19408-74-3	5.38 JB	0.102	5.54	1
11031	1234678-HpCDD	35822-46-9	709 B	0.414	5.54	1
11031	OCDD	3268-87-9	13,100 EB	0.317	11.1	1
11031	2378-TCDF	51207-31-9	0.340 JB	0.0843	1.11	1
11031	12378-PeCDF	57117-41-6	0.823 JBQ	0.0435	5.54	1
11031	23478-PeCDF	57117-31-4	0.717 JB	0.0422	5.54	1
11031	123478-HxCDF	70648-26-9	2.12 JB	0.101	5.54	1
11031	123678-HxCDF	57117-44-9	0.723 JB	0.0904	5.54	1
11031	123789-HxCDF	72918-21-9	0.659 JB	0.0804	5.54	1
11031	234678-HxCDF	60851-34-5	0.799 JB	0.0713	5.54	1
11031	1234678-HpCDF	67562-39-4	26.0 B	0.0823	5.54	1
11031	1234789-HpCDF	55673-89-7	2.06 JB	0.0973	5.54	1
11031	OCDF	39001-02-0	71.5 B	0.0670	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	69	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	69	28 - 130
13C12-123789-HxCDD	72	28 - 130
13C12-1234678-HpCDD	73	23 - 140
13C12-OCDD	74	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	52	26 - 152
13C12-123678-HxCDF	56	26 - 123
13C12-234678-HxCDF	71	28 - 136

*=This limit was used in the evaluation of the final result

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296084
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD015 SDG#: DX087-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Labeled Compounds	%Rec	Windows
13C12-123789-HxCDF	74	29 - 147
13C12-1234678-HpCDF	61	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	61	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296084
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD015 SDG#: DX087-07

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 20:24	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296085
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD016 SDG#: DX087-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	11.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296085
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD016 SDG#: DX087-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0564	JQ	0.0183	1.08	1
11031	12378-PeCDD	40321-76-4	0.249	JB	0.0519	5.38	1
11031	123478-HxCDD	39227-28-6	0.518	JB	0.0675	5.38	1
11031	123678-HxCDD	57653-85-7	2.51	JB	0.0728	5.38	1
11031	123789-HxCDD	19408-74-3	1.28	JB	0.0685	5.38	1
11031	1234678-HpCDD	35822-46-9	110	B	0.143	5.38	1
11031	OCDD	3268-87-9	1,930	B	0.129	10.8	1
11031	2378-TCDF	51207-31-9	1.09	B	0.151	1.08	1
11031	12378-PeCDF	57117-41-6	4.39	JB	0.0886	5.38	1
11031	23478-PeCDF	57117-31-4	1.18	JB	0.0823	5.38	1
11031	123478-HxCDF	70648-26-9	7.94	B	0.0771	5.38	1
11031	123678-HxCDF	57117-44-9	0.791	JB	0.0746	5.38	1
11031	123789-HxCDF	72918-21-9	0.442	JB	0.0784	5.38	1
11031	234678-HxCDF	60851-34-5	0.465	JBQ	0.0713	5.38	1
11031	1234678-HpCDF	67562-39-4	4.92	JB	0.0432	5.38	1
11031	1234789-HpCDF	55673-89-7	0.508	JB	0.0552	5.38	1
11031	OCDF	39001-02-0	12.7	B	0.0458	10.8	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	81	25 - 164
13C12-12378-PeCDD	81	25 - 181
13C12-123478-HxCDD	79	32 - 141
13C12-123678-HxCDD	78	28 - 130
13C12-123789-HxCDD	80	28 - 130
13C12-1234678-HpCDD	79	23 - 140
13C12-OCDD	76	17 - 157
13C12-2378-TCDF	79	24 - 169
13C12-12378-PeCDF	82	24 - 185
13C12-23478-PeCDF	81	21 - 178
13C12-123478-HxCDF	78	26 - 152
13C12-123678-HxCDF	79	26 - 123
13C12-234678-HxCDF	80	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	77	26 - 138
13C12-OCDF	72	17 - 157
13C12-1278-TCDD (CRS)	87	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-016-SA5DN-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296085
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD016 SDG#: DX087-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296085
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD016 SDG#: DX087-08

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/07/2011 21:20	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296086
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD017 SDG#: DX087-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	10.7	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296086
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD017 SDG#: DX087-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0612	JQ	0.0199	1.10	1
11031	12378-PeCDD	40321-76-4	0.438	JBQ	0.0700	5.49	1
11031	123478-HxCDD	39227-28-6	0.175	JB	0.0546	5.49	1
11031	123678-HxCDD	57653-85-7	0.543	JB	0.0571	5.49	1
11031	123789-HxCDD	19408-74-3	0.639	JB	0.0557	5.49	1
11031	1234678-HpCDD	35822-46-9	10.3	B	0.0473	5.49	1
11031	OCDD	3268-87-9	126	B	0.0498	11.0	1
11031	2378-TCDF	51207-31-9	2.09	B	0.189	1.10	1
11650	2378-TCDF-Conf	51207-31-9	0.964	JB	0.0562	1.10	1
11031	12378-PeCDF	57117-41-6	5.65	B	0.107	5.49	1
11031	23478-PeCDF	57117-31-4	2.28	JB	0.0990	5.49	1
11031	123478-HxCDF	70648-26-9	18.5	B	0.0888	5.49	1
11031	123678-HxCDF	57117-44-9	0.948	JB	0.0862	5.49	1
11031	123789-HxCDF	72918-21-9	0.582	JB	0.0969	5.49	1
11031	234678-HxCDF	60851-34-5	0.693	JB	0.0842	5.49	1
11031	1234678-HpCDF	67562-39-4	2.11	JB	0.0277	5.49	1
11031	1234789-HpCDF	55673-89-7	0.342	JB	0.0361	5.49	1
11031	OCDF	39001-02-0	4.42	JB	0.0381	11.0	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	73	25 - 164
13C12-2378-TCDF-Conf	77	24 - 169
13C12-12378-PeCDD	72	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	74	28 - 130
13C12-123789-HxCDD	73	28 - 130
13C12-1234678-HpCDD	72	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	71	21 - 178
13C12-123478-HxCDF	73	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	73	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	71	26 - 138
13C12-OCDF	66	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296086
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD017 SDG#: DX087-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296086
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD017 SDG#: DX087-09

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 01:20	Nelson H Risser	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	11155001	06/09/2011 17:38	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296087
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD019 SDG#: DX087-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	13.8	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296087
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD019 SDG#: DX087-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0320	JQ	0.0173	1.14	1
11031	12378-PeCDD	40321-76-4	0.118	JBQ	0.0278	5.70	1
11031	123478-HxCDD	39227-28-6	0.182	JBQ	0.0543	5.70	1
11031	123678-HxCDD	57653-85-7	0.896	JB	0.0565	5.70	1
11031	123789-HxCDD	19408-74-3	0.693	JB	0.0555	5.70	1
11031	1234678-HpCDD	35822-46-9	27.7	B	0.0813	5.70	1
11031	OCDD	3268-87-9	426	B	0.0829	11.4	1
11031	2378-TCDF	51207-31-9	0.141	JB	0.0524	1.14	1
11031	12378-PeCDF	57117-41-6	0.342	JB	0.0280	5.70	1
11031	23478-PeCDF	57117-31-4	0.224	JB	0.0280	5.70	1
11031	123478-HxCDF	70648-26-9	0.779	JB	0.0443	5.70	1
11031	123678-HxCDF	57117-44-9	0.134	JB	0.0412	5.70	1
11031	123789-HxCDF	72918-21-9	0.474	JB	0.0473	5.70	1
11031	234678-HxCDF	60851-34-5	0.169	JBQ	0.0399	5.70	1
11031	1234678-HpCDF	67562-39-4	1.60	JB	0.0290	5.70	1
11031	1234789-HpCDF	55673-89-7	0.180	JBQ	0.0370	5.70	1
11031	OCDF	39001-02-0	4.52	JB	0.0404	11.4	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	71	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	73	32 - 141
13C12-123678-HxCDD	70	28 - 130
13C12-123789-HxCDD	74	28 - 130
13C12-1234678-HpCDD	74	23 - 140
13C12-OCDD	71	17 - 157
13C12-2378-TCDF	69	24 - 169
13C12-12378-PeCDF	73	24 - 185
13C12-23478-PeCDF	72	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	73	26 - 123
13C12-234678-HxCDF	74	28 - 136
13C12-123789-HxCDF	73	29 - 147
13C12-1234678-HpCDF	73	28 - 143
13C12-1234789-HpCDF	72	26 - 138
13C12-OCDF	67	17 - 157
13C12-1278-TCDD (CRS)	79	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-019-SA5DN-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296087
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD019 SDG#: DX087-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296087
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD019 SDG#: DX087-10

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 02:16	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296088
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD021 SDG#: DX087-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	14.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296088
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD021 SDG#: DX087-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0317	JQ	0.0182	1.13	1
11031	12378-PeCDD	40321-76-4	0.266	JBQ	0.0348	5.67	1
11031	123478-HxCDD	39227-28-6	1.45	JB	0.0837	5.67	1
11031	123678-HxCDD	57653-85-7	10.3	B	0.0895	5.67	1
11031	123789-HxCDD	19408-74-3	3.84	JB	0.0866	5.67	1
11031	1234678-HpCDD	35822-46-9	535	B	0.278	5.67	1
11031	OCDD	3268-87-9	9,760	EB	0.177	11.3	1
11031	2378-TCDF	51207-31-9	0.320	JB	0.108	1.13	1
11031	12378-PeCDF	57117-41-6	0.660	JB	0.0329	5.67	1
11031	23478-PeCDF	57117-31-4	0.241	JBQ	0.0311	5.67	1
11031	123478-HxCDF	70648-26-9	0.612	JB	0.0487	5.67	1
11031	123678-HxCDF	57117-44-9	0.297	JB	0.0477	5.67	1
11031	123789-HxCDF	72918-21-9	0.348	JB	0.0581	5.67	1
11031	234678-HxCDF	60851-34-5	0.449	JB	0.0497	5.67	1
11031	1234678-HpCDF	67562-39-4	19.1	B	0.0605	5.67	1
11031	1234789-HpCDF	55673-89-7	1.56	JB	0.0871	5.67	1
11031	OCDF	39001-02-0	53.2	B	0.0546	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	71	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	68	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	70	21 - 178
13C12-123478-HxCDF	70	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	67	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	63	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-021-SA5DN-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296088
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD021 SDG#: DX087-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296088
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD021 SDG#: DX087-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 03:13	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296089
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD022 SDG#: DX087-12BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296089
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD022 SDG#: DX087-12BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0446	JQ	0.0180	1.13	1
11031	12378-PeCDD	40321-76-4	0.285	JBQ	0.0365	5.65	1
11031	123478-HxCDD	39227-28-6	0.625	JB	0.0703	5.65	1
11031	123678-HxCDD	57653-85-7	1.99	JB	0.0739	5.65	1
11031	123789-HxCDD	19408-74-3	1.42	JB	0.0695	5.65	1
11031	1234678-HpCDD	35822-46-9	81.1	B	0.0907	5.65	1
11031	OCDD	3268-87-9	786	B	0.103	11.3	1
11031	2378-TCDF	51207-31-9	0.246	JB	0.0758	1.13	1
11031	12378-PeCDF	57117-41-6	0.673	JB	0.0349	5.65	1
11031	23478-PeCDF	57117-31-4	0.641	JB	0.0343	5.65	1
11031	123478-HxCDF	70648-26-9	0.673	JB	0.0416	5.65	1
11031	123678-HxCDF	57117-44-9	0.398	JB	0.0403	5.65	1
11031	123789-HxCDF	72918-21-9	0.598	JB	0.0454	5.65	1
11031	234678-HxCDF	60851-34-5	0.420	JB	0.0398	5.65	1
11031	1234678-HpCDF	67562-39-4	5.13	JB	0.0284	5.65	1
11031	1234789-HpCDF	55673-89-7	0.419	JB	0.0358	5.65	1
11031	OCDF	39001-02-0	15.0	B	0.0363	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	69	25 - 181
13C12-123478-HxCDD	69	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	68	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	60	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	67	24 - 185
13C12-23478-PeCDF	67	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	66	28 - 143
13C12-1234789-HpCDF	65	26 - 138
13C12-OCDF	58	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-022-SA5DN-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296089
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD022 SDG#: DX087-12BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296089
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD022 SDG#: DX087-12BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 04:09	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296090
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD022 SDG#: DX087-12MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296090
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD022 SDG#: DX087-12MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	23.7		0.0294	1.15	1
11031	12378-PeCDD	40321-76-4	122	B	0.0467	5.74	1
11031	123478-HxCDD	39227-28-6	123	B	0.0767	5.74	1
11031	123678-HxCDD	57653-85-7	124	B	0.0803	5.74	1
11031	123789-HxCDD	19408-74-3	122	B	0.0780	5.74	1
11031	1234678-HpCDD	35822-46-9	175	B	0.130	5.74	1
11031	OCDD	3268-87-9	787	B	0.103	11.5	1
11031	2378-TCDF	51207-31-9	25.3	B	0.0819	1.15	1
11031	12378-PeCDF	57117-41-6	121	B	0.0466	5.74	1
11031	23478-PeCDF	57117-31-4	121	B	0.0442	5.74	1
11031	123478-HxCDF	70648-26-9	123	B	0.0971	5.74	1
11031	123678-HxCDF	57117-44-9	121	B	0.0917	5.74	1
11031	123789-HxCDF	72918-21-9	122	B	0.110	5.74	1
11031	234678-HxCDF	60851-34-5	122	B	0.0923	5.74	1
11031	1234678-HpCDF	67562-39-4	124	B	0.0610	5.74	1
11031	1234789-HpCDF	55673-89-7	119	B	0.0827	5.74	1
11031	OCDF	39001-02-0	250	B	0.0644	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	64	25 - 164
13C12-12378-PeCDD	64	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	64	28 - 130
13C12-123789-HxCDD	65	28 - 130
13C12-1234678-HpCDD	63	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	63	24 - 169
13C12-12378-PeCDF	65	24 - 185
13C12-23478-PeCDF	63	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	67	26 - 123
13C12-234678-HxCDF	66	28 - 136
13C12-123789-HxCDF	64	29 - 147
13C12-1234678-HpCDF	63	28 - 143
13C12-1234789-HpCDF	57	26 - 138
13C12-OCDF	51	17 - 157
13C12-1278-TCDD (CRS)	71	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-022-SA5DN-SS-0.0-0.5MS Soil**
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296090
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD022 SDG#: DX087-12MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296090
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD022 SDG#: DX087-12MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 14:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296091
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD022 SDG#: DX087-12MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296091
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD022 SDG#: DX087-12MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	23.0		0.0279	1.13	1
11031	12378-PeCDD	40321-76-4	121	B	0.0567	5.65	1
11031	123478-HxCDD	39227-28-6	120	B	0.0775	5.65	1
11031	123678-HxCDD	57653-85-7	121	B	0.0820	5.65	1
11031	123789-HxCDD	19408-74-3	120	B	0.0769	5.65	1
11031	1234678-HpCDD	35822-46-9	198	B	0.103	5.65	1
11031	OCDD	3268-87-9	1,150	B	0.122	11.3	1
11031	2378-TCDF	51207-31-9	24.8	B	0.0758	1.13	1
11031	12378-PeCDF	57117-41-6	120	B	0.0419	5.65	1
11031	23478-PeCDF	57117-31-4	118	B	0.0370	5.65	1
11031	123478-HxCDF	70648-26-9	122	B	0.0621	5.65	1
11031	123678-HxCDF	57117-44-9	120	B	0.0595	5.65	1
11031	123789-HxCDF	72918-21-9	119	B	0.0618	5.65	1
11031	234678-HxCDF	60851-34-5	121	B	0.0544	5.65	1
11031	1234678-HpCDF	67562-39-4	123	B	0.0536	5.65	1
11031	1234789-HpCDF	55673-89-7	118	B	0.0630	5.65	1
11031	OCDF	39001-02-0	251	B	0.0486	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	72	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	69	23 - 140
13C12-OCDD	64	17 - 157
13C12-2378-TCDF	71	24 - 169
13C12-12378-PeCDF	72	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	63	26 - 152
13C12-123678-HxCDF	65	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	71	29 - 147
13C12-1234678-HpCDF	65	28 - 143
13C12-1234789-HpCDF	66	26 - 138
13C12-OCDF	60	17 - 157
13C12-1278-TCDD (CRS)	80	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SL-022-SA5DN-SS-0.0-0.5MSD Soil**
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296091
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD022 SDG#: DX087-12MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296091
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD022 SDG#: DX087-12MSD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 06:02	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296092
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD023 SDG#: DX087-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	12.4	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296092
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD023 SDG#: DX087-13

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0243	JQ	0.0169	1.11	1
11031	12378-PeCDD	40321-76-4	0.234	JBQ	0.0260	5.57	1
11031	123478-HxCDD	39227-28-6	0.329	JB	0.0599	5.57	1
11031	123678-HxCDD	57653-85-7	1.40	JB	0.0628	5.57	1
11031	123789-HxCDD	19408-74-3	0.891	JB	0.0592	5.57	1
11031	1234678-HpCDD	35822-46-9	73.4	B	0.103	5.57	1
11031	OCDD	3268-87-9	911	B	0.102	11.1	1
11031	2378-TCDF	51207-31-9	0.0866	U	0.0866	1.11	1
11031	12378-PeCDF	57117-41-6	0.498	JB	0.0304	5.57	1
11031	23478-PeCDF	57117-31-4	0.251	JB	0.0288	5.57	1
11031	123478-HxCDF	70648-26-9	0.421	JB	0.0366	5.57	1
11031	123678-HxCDF	57117-44-9	0.218	JB	0.0342	5.57	1
11031	123789-HxCDF	72918-21-9	0.456	JB	0.0444	5.57	1
11031	234678-HxCDF	60851-34-5	0.239	JB	0.0356	5.57	1
11031	1234678-HpCDF	67562-39-4	3.03	JB	0.0304	5.57	1
11031	1234789-HpCDF	55673-89-7	0.391	JB	0.0449	5.57	1
11031	OCDF	39001-02-0	8.57	JB	0.0439	11.1	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	66	25 - 164
13C12-12378-PeCDD	73	25 - 181
13C12-123478-HxCDD	68	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	69	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	61	17 - 157
13C12-2378-TCDF	65	24 - 169
13C12-12378-PeCDF	70	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	68	26 - 152
13C12-123678-HxCDF	70	26 - 123
13C12-234678-HxCDF	69	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	72	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	55	17 - 157
13C12-1278-TCDD (CRS)	76	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-023-SA5DN-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296092
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD023 SDG#: DX087-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296092
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD023 SDG#: DX087-13

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 06:59	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402B	06/09/2011 21:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296093
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD052 SDG#: DX087-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	13.5	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296093
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD052 SDG#: DX087-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0169	U	0.0169	1.15	1
11031	12378-PeCDD	40321-76-4	0.205	JBQ	0.0260	5.76	1
11031	123478-HxCDD	39227-28-6	0.153	JBQ	0.0449	5.76	1
11031	123678-HxCDD	57653-85-7	0.481	JB	0.0474	5.76	1
11031	123789-HxCDD	19408-74-3	0.555	JB	0.0445	5.76	1
11031	1234678-HpCDD	35822-46-9	9.90	B	0.0525	5.76	1
11031	OCDD	3268-87-9	115	B	0.0571	11.5	1
11031	2378-TCDF	51207-31-9	0.122	JB	0.0261	1.15	1
11031	12378-PeCDF	57117-41-6	0.215	JB	0.0158	5.76	1
11031	23478-PeCDF	57117-31-4	0.185	JBQ	0.0153	5.76	1
11031	123478-HxCDF	70648-26-9	0.366	JB	0.0297	5.76	1
11031	123678-HxCDF	57117-44-9	0.146	JBQ	0.0277	5.76	1
11031	123789-HxCDF	72918-21-9	0.552	JB	0.0290	5.76	1
11031	234678-HxCDF	60851-34-5	0.161	JB	0.0243	5.76	1
11031	1234678-HpCDF	67562-39-4	0.773	JB	0.0267	5.76	1
11031	1234789-HpCDF	55673-89-7	0.129	JBQ	0.0355	5.76	1
11031	OCDF	39001-02-0	1.47	JB	0.0553	11.5	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	70	25 - 164
13C12-12378-PeCDD	70	25 - 181
13C12-123478-HxCDD	66	32 - 141
13C12-123678-HxCDD	67	28 - 130
13C12-123789-HxCDD	70	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	59	17 - 157
13C12-2378-TCDF	68	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	69	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	60	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	66	29 - 147
13C12-1234678-HpCDF	62	28 - 143
13C12-1234789-HpCDF	58	26 - 138
13C12-OCDF	49	17 - 157
13C12-1278-TCDD (CRS)	77	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-052-SA5DN-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296093
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD052 SDG#: DX087-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296093
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD052 SDG#: DX087-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 07:55	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296094
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD053 SDG#: DX087-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	11.0	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296094
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD053 SDG#: DX087-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.130	JQ	0.0181	1.12	1
11031	12378-PeCDD	40321-76-4	0.440	JB	0.0425	5.58	1
11031	123478-HxCDD	39227-28-6	0.379	JB	0.0660	5.58	1
11031	123678-HxCDD	57653-85-7	1.60	JB	0.0689	5.58	1
11031	123789-HxCDD	19408-74-3	1.79	JB	0.0645	5.58	1
11031	1234678-HpCDD	35822-46-9	27.4	B	0.0755	5.58	1
11031	OCDD	3268-87-9	358	B	0.0963	11.2	1
11031	2378-TCDF	51207-31-9	0.404	JB	0.0778	1.12	1
11031	12378-PeCDF	57117-41-6	0.870	JB	0.0363	5.58	1
11031	23478-PeCDF	57117-31-4	0.613	JBQ	0.0342	5.58	1
11031	123478-HxCDF	70648-26-9	0.623	JB	0.0463	5.58	1
11031	123678-HxCDF	57117-44-9	0.422	JB	0.0443	5.58	1
11031	123789-HxCDF	72918-21-9	1.63	JB	0.0512	5.58	1
11031	234678-HxCDF	60851-34-5	0.322	JB	0.0424	5.58	1
11031	1234678-HpCDF	67562-39-4	2.38	JB	0.0282	5.58	1
11031	1234789-HpCDF	55673-89-7	0.280	JB	0.0378	5.58	1
11031	OCDF	39001-02-0	5.12	JB	0.0491	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	84	25 - 164
13C12-12378-PeCDD	84	25 - 181
13C12-123478-HxCDD	83	32 - 141
13C12-123678-HxCDD	80	28 - 130
13C12-123789-HxCDD	84	28 - 130
13C12-1234678-HpCDD	81	23 - 140
13C12-OCDD	70	17 - 157
13C12-2378-TCDF	83	24 - 169
13C12-12378-PeCDF	83	24 - 185
13C12-23478-PeCDF	82	21 - 178
13C12-123478-HxCDF	79	26 - 152
13C12-123678-HxCDF	81	26 - 123
13C12-234678-HxCDF	84	28 - 136
13C12-123789-HxCDF	85	29 - 147
13C12-1234678-HpCDF	79	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	59	17 - 157
13C12-1278-TCDD (CRS)	93	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Sample Description: **SL-053-SA5DN-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296094
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD053 SDG#: DX087-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296094
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SD053 SDG#: DX087-15

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 08:52	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296095
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP05 SDG#: DX087-16FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	13.1	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296095
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP05 SDG#: DX087-16FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.0422	JQ	0.0212	1.12	1
11031	12378-PeCDD	40321-76-4	0.284	JBQ	0.0425	5.61	1
11031	123478-HxCDD	39227-28-6	0.416	JB	0.0902	5.61	1
11031	123678-HxCDD	57653-85-7	1.82	JB	0.0956	5.61	1
11031	123789-HxCDD	19408-74-3	1.22	JBQ	0.0915	5.61	1
11031	1234678-HpCDD	35822-46-9	73.8	B	0.121	5.61	1
11031	OCDD	3268-87-9	782	B	0.176	11.2	1
11031	2378-TCDF	51207-31-9	0.0788	U	0.0788	1.12	1
11031	12378-PeCDF	57117-41-6	0.676	JB	0.0402	5.61	1
11031	23478-PeCDF	57117-31-4	0.880	JB	0.0383	5.61	1
11031	123478-HxCDF	70648-26-9	0.581	JB	0.0503	5.61	1
11031	123678-HxCDF	57117-44-9	0.371	JB	0.0465	5.61	1
11031	123789-HxCDF	72918-21-9	0.613	JBQ	0.0533	5.61	1
11031	234678-HxCDF	60851-34-5	0.372	JB	0.0468	5.61	1
11031	1234678-HpCDF	67562-39-4	4.16	JB	0.0354	5.61	1
11031	1234789-HpCDF	55673-89-7	0.317	JBQ	0.0466	5.61	1
11031	OCDF	39001-02-0	13.0	B	0.0565	11.2	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	68	25 - 164
13C12-12378-PeCDD	66	25 - 181
13C12-123478-HxCDD	67	32 - 141
13C12-123678-HxCDD	66	28 - 130
13C12-123789-HxCDD	67	28 - 130
13C12-1234678-HpCDD	66	23 - 140
13C12-OCDD	58	17 - 157
13C12-2378-TCDF	67	24 - 169
13C12-12378-PeCDF	68	24 - 185
13C12-23478-PeCDF	66	21 - 178
13C12-123478-HxCDF	66	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	68	28 - 136
13C12-123789-HxCDF	68	29 - 147
13C12-1234678-HpCDF	66	28 - 143
13C12-1234789-HpCDF	61	26 - 138
13C12-OCDF	53	17 - 157
13C12-1278-TCDD (CRS)	74	35 - 197

Dioxins/Furans Data Qualifiers:

B *Detected in Method Blank*
U *Undetected*
J *Estimated concentration between Estimated Detection Limit and Minimum Level*
E *Exceeds calibration range*
C *Confirmed quantitation on secondary GC column*
Q *EMPC - Estimated Maximum Possible Concentration*

*=This limit was used in the evaluation of the final result

Sample Description: **DUP05-SA5DN-QC-052311 Soil**
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296095
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP05 SDG#: DX087-16FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296095
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DDP05 SDG#: DX087-16FD

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 09:49	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402B	06/09/2011 21:05	Scott W Freisher	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296096
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DEB05 SDG#: DX087-17EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received EDL*	As Received MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		pg/l		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	1.19	JQ	0.341	1.96	1
10915	12378-PeCDD	40321-76-4	0.774	JB	0.377	9.78	1
10915	123478-HxCDD	39227-28-6	2.29	JB	0.285	9.78	1
10915	123678-HxCDD	57653-85-7	2.08	JB	0.299	9.78	1
10915	123789-HxCDD	19408-74-3	3.86	JBQ	0.301	9.78	1
10915	1234678-HpCDD	35822-46-9	6.16	JBQ	0.356	9.78	1
10915	OCDD	3268-87-9	15.0	JB	0.433	19.6	1
10915	2378-TCDF	51207-31-9	1.14	JBQ	0.281	1.96	1
10915	12378-PeCDF	57117-41-6	1.55	JB	0.200	9.78	1
10915	23478-PeCDF	57117-31-4	2.21	JBQ	0.185	9.78	1
10915	123478-HxCDF	70648-26-9	1.93	JB	0.243	9.78	1
10915	123678-HxCDF	57117-44-9	1.16	JBQ	0.236	9.78	1
10915	123789-HxCDF	72918-21-9	1.79	JBQ	0.240	9.78	1
10915	234678-HxCDF	60851-34-5	3.36	JB	0.214	9.78	1
10915	1234678-HpCDF	67562-39-4	4.83	JBQ	0.267	9.78	1
10915	1234789-HpCDF	55673-89-7	3.65	JB	0.305	9.78	1
10915	OCDF	39001-02-0	6.45	JBQ	0.454	19.6	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	67	25 - 164
13C12-12378-PeCDD	68	25 - 181
13C12-123478-HxCDD	64	32 - 141
13C12-123678-HxCDD	68	28 - 130
13C12-123789-HxCDD	65	28 - 130
13C12-1234678-HpCDD	67	23 - 140
13C12-OCDD	69	17 - 157
13C12-2378-TCDF	73	24 - 169
13C12-12378-PeCDF	71	24 - 185
13C12-23478-PeCDF	73	21 - 178
13C12-123478-HxCDF	65	26 - 152
13C12-123678-HxCDF	68	26 - 123
13C12-234678-HxCDF	71	28 - 136
13C12-123789-HxCDF	76	29 - 147
13C12-1234678-HpCDF	68	28 - 143
13C12-1234789-HpCDF	73	26 - 138
13C12-OCDF	73	17 - 157
13C12-1278-TCDD (CRS)	78	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column
Q EMPC - Estimated Maximum Possible Concentration

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **EB05-SA5DN-SS-052311 Water**
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296096
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DEB05 SDG#: DX087-17EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received EDL*	As Received MRL	Dilution Factor

F *Interference is present*
S *Saturation of detection signal*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	10b Dioxin/Furan by EPA 1613B	EPA 1613B	1	11147001	06/02/2011 05:56	Nelson H Risser	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B	1	11147001	05/27/2011 08:00	Deborah M Zimmerman	1

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296097
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SDD35 SDG#: DX087-18*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	
11625	Moisture Content by 160.3	n.a.	13.6	0.50	0.50	1

*=This limit was used in the evaluation of the final result

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296097
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SDD35 SDG#: DX087-18*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry EDL*	Dry MRL	Dilution Factor
Dioxins/Furans	**EPA 1613B**		ng/kg		ng/kg	ng/kg	
11031	2378-TCDD	1746-01-6	0.146	J	0.0236	1.13	1
11031	12378-PeCDD	40321-76-4	0.611	JB	0.0615	5.67	1
11031	123478-HxCDD	39227-28-6	0.914	JB	0.0955	5.67	1
11031	123678-HxCDD	57653-85-7	2.43	JB	0.0994	5.67	1
11031	123789-HxCDD	19408-74-3	1.88	JB	0.0956	5.67	1
11031	1234678-HpCDD	35822-46-9	63.7	B	0.104	5.67	1
11031	OCDD	3268-87-9	646	B	0.0791	11.3	1
11031	2378-TCDF	51207-31-9	2.04	B	0.0839	1.13	1
11650	2378-TCDF-Conf	51207-31-9	1.95	B	0.0479	1.13	1
11031	12378-PeCDF	57117-41-6	0.513	JB	0.0252	5.67	1
11031	23478-PeCDF	57117-31-4	0.671	JB	0.0244	5.67	1
11031	123478-HxCDF	70648-26-9	0.682	JB	0.0481	5.67	1
11031	123678-HxCDF	57117-44-9	0.515	JB	0.0471	5.67	1
11031	123789-HxCDF	72918-21-9	0.343	JB	0.0484	5.67	1
11031	234678-HxCDF	60851-34-5	0.687	JB	0.0433	5.67	1
11031	1234678-HpCDF	67562-39-4	8.42	B	0.0462	5.67	1
11031	1234789-HpCDF	55673-89-7	0.823	JBQ	0.0590	5.67	1
11031	OCDF	39001-02-0	21.0	B	0.0429	11.3	1

Labeled Compounds	%Rec	Windows
13C12-2378-TCDD	63	25 - 164
13C12-2378-TCDF-Conf	67	24 - 169
13C12-12378-PeCDD	61	25 - 181
13C12-123478-HxCDD	63	32 - 141
13C12-123678-HxCDD	60	28 - 130
13C12-123789-HxCDD	63	28 - 130
13C12-1234678-HpCDD	60	23 - 140
13C12-OCDD	53	17 - 157
13C12-2378-TCDF	62	24 - 169
13C12-12378-PeCDF	62	24 - 185
13C12-23478-PeCDF	61	21 - 178
13C12-123478-HxCDF	56	26 - 152
13C12-123678-HxCDF	57	26 - 123
13C12-234678-HxCDF	62	28 - 136
13C12-123789-HxCDF	65	29 - 147
13C12-1234678-HpCDF	58	28 - 143
13C12-1234789-HpCDF	55	26 - 138
13C12-OCDF	45	17 - 157
13C12-1278-TCDD (CRS)	70	35 - 197

Dioxins/Furans Data Qualifiers:

B Detected in Method Blank
U Undetected
J Estimated concentration between Estimated Detection Limit and Minimum Level
E Exceeds calibration range
C Confirmed quantitation on secondary GC column

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: **SED-035-SIV-SD Sediment**
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296097
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SDD35 SDG#: DX087-18*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry EDL*	Dry MRL	Dilution Factor

Q *EMPC - Estimated Maximum Possible Concentration*
F *Interference is present*
S *Saturation of detection signal*

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296097
LLI Group # 1248219
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 06/12/2011 18:19

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SDD35 SDG#: DX087-18*

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11031	10a Dioxin/Furan by EPA 1613B	EPA 1613B	1	11155001	06/08/2011 13:48	Nelson H Risser	1
11650	Dioxins/Furans in Solids-Conf	EPA 1613B	1	11155001	06/09/2011 18:44	Nelson H Risser	1
11030	Dioxins/Furans in Solids - Sox	EPA 1613B	1	11155001	06/04/2011 12:00	Deborah M Zimmerman	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248219
Reported: 06/12/11 at 06:19 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11153162401B	Sample number(s): 6296082-6296083,6296086,6296093-6296094,6296097								
Moisture Content by 160.3					100		80-120		
Batch number: 11160162402A	Sample number(s): 6296078-6296081,6296084-6296085,6296087-6296091								
Moisture Content by 160.3					100		80-120		
Batch number: 11160162402B	Sample number(s): 6296092,6296095								
Moisture Content by 160.3					100		80-120		

Analysis Name	Blank Result	Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 11147001	Sample number(s): 6296096								
2378-TCDD	0.409 U	0.409	2.00	pg/l	98		67-158		
12378-PeCDD	1.10 J	0.462	10.0	pg/l	99		70-142		
123478-HxCDD	1.05 J	0.375	10.0	pg/l	97		70-164		
123678-HxCDD	1.65 J	0.380	10.0	pg/l	98		76-134		
123789-HxCDD	1.92 J	0.379	10.0	pg/l	99		64-162		
1234678-HpCDD	5.92 J	0.571	10.0	pg/l	95		70-140		
OCDD	18.2 J	0.525	20.0	pg/l	95		78-144		
2378-TCDF	0.454 J	0.375	2.00	pg/l	102		75-158		
12378-PeCDF	1.09 J	0.272	10.0	pg/l	100		80-134		
23478-PeCDF	1.91 J	0.241	10.0	pg/l	100		68-160		
123478-HxCDF	1.89 J	0.286	10.0	pg/l	99		72-134		
123678-HxCDF	1.45 J	0.277	10.0	pg/l	97		84-130		
123789-HxCDF	1.58 J	0.314	10.0	pg/l	98		78-130		
234678-HxCDF	1.60 J	0.255	10.0	pg/l	97		70-156		
1234678-HpCDF	4.23 J	0.236	10.0	pg/l	94		82-122		
1234789-HpCDF	1.72 J	0.324	10.0	pg/l	99		78-138		
OCDF	6.41 J	0.629	20.0	pg/l	96		63-170		
Batch number: 11155001	Sample number(s): 6296078-6296095,6296097								
2378-TCDD	0.0253 U	0.0253	1.00	ng/kg	102		67-158		
12378-PeCDD	0.0548 J	0.0216	5.00	ng/kg	107		70-142		
123478-HxCDD	0.0444 J	0.0190	5.00	ng/kg	106		70-164		
123678-HxCDD	0.0613 J	0.0196	5.00	ng/kg	106		76-134		
123789-HxCDD	0.106 J	0.0186	5.00	ng/kg	104		64-162		
1234678-HpCDD	0.294 J	0.0267	5.00	ng/kg	104		70-140		
OCDD	0.764 J	0.0310	10.0	ng/kg	104		78-144		
2378-TCDF	0.0258 J	0.0226	1.00	ng/kg	111		75-158		
2378-TCDF-Conf	0.0331 J	0.0235	1.00	ng/kg					
12378-PeCDF	0.0626 J	0.0117	5.00	ng/kg	106		80-134		
23478-PeCDF	0.0908 J	0.0107	5.00	ng/kg	104		68-160		
123478-HxCDF	0.0897 J	0.0161	5.00	ng/kg	107		72-134		
123678-HxCDF	0.0995 J	0.0147	5.00	ng/kg	105		84-130		
123789-HxCDF	0.145 J	0.0182	5.00	ng/kg	106		78-130		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248219
Reported: 06/12/11 at 06:19 PM

Analysis Name	Blank Result		Blank EDL**	Blank MRL	Report Units	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
234678-HxCDF	0.0869	J	0.0149	5.00	ng/kg	108		70-156		
1234678-HpCDF	0.229	J	0.0127	5.00	ng/kg	106		82-122		
1234789-HpCDF	0.103	J	0.0179	5.00	ng/kg	106		78-138		
OCDF	0.318	J	0.0347	10.0	ng/kg	107		63-170		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11153162401B	Sample number(s): 6296082-6296083,6296086,6296093-6296094,6296097 BKG: P296040								
Moisture Content by 160.3						13.1	13.8	6	20
Batch number: 11160162402A	Sample number(s): 6296078-6296081,6296084-6296085,6296087-6296091 BKG: P296047								
Moisture Content by 160.3						12.9	12.9	0	20
Batch number: 11160162402B	Sample number(s): 6296092,6296095 BKG: P301476								
Moisture Content by 160.3						9.5	9.8	2	20
Batch number: 11155001	Sample number(s): 6296078-6296095,6296097 UNSPK: 6296089								
2378-TCDD	103	102	67-158	3	25				
12378-PeCDD	106	107	70-142	1	25				
123478-HxCDD	106	106	70-164	2	25				
123678-HxCDD	106	105	76-134	2	25				
123789-HxCDD	105	105	64-162	2	25				
1234678-HpCDD	82	103	70-140	12	25				
OCDD	1*	162*	78-144	37*	25				
2378-TCDF	109	109	75-158	2	25				
12378-PeCDF	105	105	80-134	1	25				
23478-PeCDF	105	104	68-160	3	25				
123478-HxCDF	107	107	72-134	1	25				
123678-HxCDF	105	106	84-130	0	25				
123789-HxCDF	106	104	78-130	3	25				
234678-HxCDF	106	107	70-156	1	25				
1234678-HpCDF	104	104	82-122	1	25				
1234789-HpCDF	104	104	78-138	1	25				
OCDF	102	104	63-170	1	25				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 10b Dioxin/Furan by EPA 1613B
Batch number: 11147001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6296096	67	73	65	68	71	76
Blank	56	59	51	54	56	55
OPR	63	72	67	69	70	72

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248219
Reported: 06/12/11 at 06:19 PM

Surrogate Quality Control

Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6296096	68	73	73	78	68	64
Blank	57	53	53	83	54	53
OPR	75	72	73	78	69	66
Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6296096	68	65	67	69	73	71
Blank	53	53	54	53	64	56
OPR	67	68	71	73	68	73
Limits:	28-130	28-130	23-140	17-157	24-169	24-185

Analysis Name: 10a Dioxin/Furan by EPA 1613B
Batch number: 11155001

	13C12-2378-TCDD	13C12-23478-PeCDF	13C12-123478-HxCDF	13C12-123678-HxCDF	13C12-234678-HxCDF	13C12-123789-HxCDF
6296078	68	70	57	61	74	73
6296079	60	64	61	64	69	65
6296080	62	65	60	63	69	67
6296081	62	65	67	69	70	70
6296082	63	64	36	41	68	68
6296083	56	55	42	45	56	57
6296084	69	69	52	56	71	74
6296085	81	81	78	79	80	85
6296086	73	71	73	73	73	76
6296087	71	72	68	73	74	73
6296088	70	70	70	70	67	65
6296089	67	67	66	67	68	71
6296090	64	63	65	67	66	64
6296091	72	73	63	65	69	71
6296092	66	69	68	70	69	66
6296093	70	69	56	60	68	66
6296094	84	82	79	81	84	85
6296095	68	66	66	68	68	68
6296097	63	61	56	57	62	65
Blank	65	69	68	73	74	72
MS	64	63	65	67	66	64
MSD	72	73	63	65	69	71
OPR	60	65	65	70	70	66
Limits:	25-164	21-178	26-152	26-123	28-136	29-147
	13C12-1234678-HpCDF	13C12-1234789-HpCDF	13C12-OCDF	13C12-1278-TCDD (CRS)	13C12-12378-PeCDD	13C12-123478-HxCDD
6296078	70	65	55	81	72	73
6296079	68	64	58	75	66	70
6296080	65	63	58	78	66	68
6296081	71	67	64	75	67	71

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248219
Reported: 06/12/11 at 06:19 PM

Surrogate Quality Control

6296082	50	59	51	76	66	65
6296083	48	51	44	60	56	54
6296084	61	66	61	78	70	68
6296085	79	77	72	87	81	79
6296086	72	71	66	79	72	73
6296087	73	72	67	79	73	73
6296088	72	63	60	77	71	68
6296089	66	65	58	76	69	69
6296090	63	57	51	71	64	66
6296091	65	66	60	80	73	68
6296092	72	61	55	76	73	68
6296093	62	58	49	77	70	66
6296094	79	73	59	93	84	83
6296095	66	61	53	74	66	67
6296097	58	55	45	70	61	63
Blank	81	69	65	86	71	76
MS	63	57	51	71	64	66
MSD	65	66	60	80	73	68
OPR	78	61	54	81	65	73

Limits:	28-143	26-138	17-157	35-197	25-181	32-141
	13C12-123678-HxCDD	13C12-123789-HxCDD	13C12-1234678-HpCDD	13C12-OCDD	13C12-2378-TCDF	13C12-12378-PeCDF
6296078	74	75	73	68	65	71
6296079	68	71	69	65	58	63
6296080	66	69	67	62	60	64
6296081	71	71	70	68	60	65
6296082	63	70	68	64	60	66
6296083	53	57	57	52	55	55
6296084	69	72	73	74	68	70
6296085	78	80	79	76	79	82
6296086	74	73	72	69	71	71
6296087	70	74	74	71	69	73
6296088	68	68	68	69	68	72
6296089	66	68	66	60	67	67
6296090	64	65	63	58	63	65
6296091	68	69	69	64	71	72
6296092	67	69	67	61	65	70
6296093	67	70	66	59	68	71
6296094	80	84	81	70	83	83
6296095	66	67	66	58	67	68
6296097	60	63	60	53	62	62
Blank	74	76	77	74	61	70
MS	64	65	63	58	63	65
MSD	68	69	69	64	71	72
OPR	70	72	72	71	58	65

Limits:	28-130	28-130	23-140	17-157	24-169	24-185
	13C12-2378-TCDF-Conf					
6296078						
6296079						
6296080						
6296081						
6296082						
6296083						

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248219
Reported: 06/12/11 at 06:19 PM

Surrogate Quality Control

6296084	
6296085	
6296086	77
6296087	
6296088	
6296089	
6296090	
6296091	
6296092	
6296093	
6296094	
6296095	
6296097	67
Blank	70
MS	
MSD	
OPR	
Limits:	24-169

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ / MRL.
(2) The unspiked result was more than four times the spike added.

13013 1248219 6296078-97

CHAIN OF CUSTODY RECORD

CDM	SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS									VOCs			SECONDARY FOR ALL LOCATIONS									1
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels $ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected						*Metals EPA 6010/6020/7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6850 (10%)	VOCs/EPA 8260B $	1,4-Dioxane EPA 8260SIM $	TPH-GRO EPA 8015B $	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
Samplers Signatures:																											
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																						
SL-084-SA5DN-SB-4.5	5/23/11	0925	SOIL	NONE	4-Encores										X	X											
SL-084-SA5DN-SB-4.0-5.0	5/23/11	0930	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X					
SL-089-SA5DN-SB-4.5	5/23/11	1020	SOIL	NONE	5-Encores										X	X	X										
SL-089-SA5DN-SB-4.0-5.0	5/23/11	1025	SOIL	NONE	4-16 oz jars	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-081-SA5DN-SB-4.5	5/23/11	1300	SOIL	NONE	5-Encores										X	X											
SL-081-SA5DN-SB-4.0-5.0	5/23/11	1310	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X					
SL-081-SA5DN-SB-9.0-10.0	5/23/11	1315	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X					
SL-075-SA5DN-SB-4.5	5/23/11	1535	SOIL	NONE	4-Encores										X	X											
SL-075-SA5DN-SB-4.0-5.0	5/23/11	1540	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X													
SL-075-SA5DN-SB-9.0-10.0	5/23/11	1545	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X													
TB-052311	5/23/11	0800	WATER	HCl	4-40 mL VOA VIALS										X	X	X										TRIP BLANK
Relinquished by: (*Signature*)	Date/Time 05/23/2011 / 1700		Received for Laboratory by: (*Signature*)																								Laboratory: Lancaster Laboratories, Inc.
Received by: (*Signature*)	Date/Time 5/24/11 0840		Airbill No.(s) 8695 1441 7961, 7994, 8008,7972, 7983																								

13013 1248219 6296078-97

CHAIN OF CUSTODY RECORD

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected

Samplers Signatures: T Phan

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020/7471A	*Fluoride EPA 300.0	*VOCs EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6850 (10%)	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	1-SS sleeve			X	X																	
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	1-SS sleeve			X	X																	
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-16 oz jars	X	X	X	X	X	X	X	X		X	X										
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-SS sleeve			X	X																	
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	1-SS sleeve			X	X																	
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	1-SS sleeve			X	X																	
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	4-16 oz jar	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	MS/MSD
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	2-SS sleeve			X	X																	MS/MSD
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	1-SS sleeve			X	X																	
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-16 oz jars	X	X	X	X	X	X	X	X		X	X										
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-SS sleeve			X	X																	
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-16 oz jars	X	X	X	X	X	X	X	X		X	X										
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-SS sleeve			X	X																	
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	1-SS sleeve			X	X																	

Relinquished by: (*Signature*)	Date/Time	Received for Laboratory by: (*Signature*)	Laboratory:
	05/23/2011 / 1700		Lancaster Laboratories, Inc.
Received by: (*Signature*)	Date/Time	Airbill No.(s)	
	5/24/11 0900	8695 1441 7961, 7994, 8008,7972, 7983	

13013 1248219 602607897

CHAIN OF CUSTODY RECORD

CDM | SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected

Samplers Signatures: TPM

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020B&7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCT's EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	12-1 liter ambers			X	X	X				X	X	X			X	X		X			
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NaOH	1-500 mL glass																X				
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	1-250 mL glass													X							
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	1-500 mL poly		X				X	X	X												
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	HNO3	1-500 mL poly	X																			
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	HCl	2-40 mL vial																				
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	4-40 mL vial																			X	

Relinquished by: (*Signature*)	Date/Time	Received for Laboratory by: (*Signature*)	Laboratory:
	05/23/2011 / 1700		Lancaster Laboratories, Inc.
Received by: (*Signature*)	**Date/Time**	**Airbill No.(s)**	
	5/24/11 1000	8695 1441 7961, 7994, 8008, 7972, 7983	

13013 1248219 6296078-97

CHAIN OF CUSTODY RECORD

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected

Samplers Signatures:

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020B&7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs/PCT's EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Methyl Mercury EPA Method 1630	**Organotin NOAA Status&Trends	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Poly											X									
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Jars												X								
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	3-16 oz. Jars	X	X	X	X	X	X	X	X	X	X										
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Poly											X									
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Jars												X								
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber											X									
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber												X								

Relinquished by: (*Signature*)	Date/Time	Received for Laboratory by: (*Signature*)	Laboratory:
	05/23/2011 / 1700		Lancaster Laboratories, Inc.
Received by: (*Signature*)	Date/Time	Airbill No.(s)	
	5/24/11 0900	8695 1441 7961, 7994, 8008,7972, 7983	

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

July 19, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 05/24/2011
Group Number: 1248313
PO Number: 1203-004-008-AL
State of Sample Origin: NA

Client Sample Description	Lancaster Labs (LLI) #
SED-035-SIV-SD Grab Soil Sample	6296495
DUP03-SIV-QC-052311 Grab Soil Sample	6296496
FB08-SIV-052311 Grab Water Sample	6296497

ELECTRONIC COPY TO CDM Federal Services Program Attn: Todd Burgesser

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

Jaime L. Ferguson
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-035-SIV-SD Grab Soil Sample

Project Name: SSFL Area IV Collocated Soil Sampling

LLI Sample # SW 6296495
LLI Group # 1248313
Account # 13013

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 07/19/2011 10:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

General Sample Comments

The analysis for Methyl Mercury was subcontracted to another laboratory.
See Attached Reports.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP03-SIV-QC-052311 Grab Soil Sample

Project Name: SSFL Area IV Collocated Soil Sampling

LLI Sample # SW 6296496
LLI Group # 1248313
Account # 13013

Collected: 05/23/2011 15:10

Submitted: 05/24/2011 09:40
Reported: 07/19/2011 10:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

General Sample Comments

The analysis for Methyl Mercury was subcontracted to another laboratory.
See Attached Reports.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: FB08-SIV-052311 Grab Water Sample

Project Name: SSFL Area IV Collocated Soil Sampling

LLI Sample # WW 6296497
LLI Group # 1248313
Account # 13013

Collected: 05/23/2011 16:00

Submitted: 05/24/2011 09:40
Reported: 07/19/2011 10:09

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

General Sample Comments

The analysis for Methyl Mercury was subcontracted to another laboratory.
See Attached Reports.

13013 1248313 6296495-97

CHAIN OF CUSTODY RECORD

CDM — SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
§ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected

Samplers Signatures:

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	PRIMARY FOR ALL LOCATIONS: *Metals EPA 6010/6020/6867/471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	SS ONLY: *Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	SECONDARY FOR ALL LOCATIONS: **Methyl Mercury EPA Method 1630	**Organotin NOAA Status&Trends	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Poly											X									
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Jars												X								
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	3-16 oz. Jars	X	X	X	X	X	X	X	X	X	X										
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Poly											X									
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Jars												X								
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber											X									
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber												X								

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Laboratory:
	05/23/2011 / 1700		Lancaster Laboratories, Inc.
Received by: (Signature)	**Date/Time**	**Airbill No.(s)**	
	5 July 1 0940	8695 1441 7961, 7994, 8008,7972, 7983	

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdm.com]
Sent: Tuesday, May 24, 2011 2:44 PM
To: Nicole Maljovec
Cc: Bloisa, Peggy
Subject: Corrections for SSFL COC 5.23.11

Attachments: COC_05_23_11_sediment(1).xlsx



COC_05_23_11_sediment(1).xlsx ...

Hi Nicole

Now that the dust has settled, Peggy and I have found my mistakes from yesterday. I have attached new updated COCs. I have highlighted the changes in red or yellow. These include:

1) SED-035-SIV-SD on the first two lines of the "Sediment Hole" COC should be SED-035-SIV-SDMS. The are the MS/MSD sample.

2) DUP01-SIV-SD should be DUP03-SIV-QC-052311

3) FB07-SIV-SS-052311 should be FB08-SIV-052311

4) For the COC starting with the sample name SL-015-SA5DN-SS-0.0-0.5, SVOCs and PCBs should only be analyzed from the sleeves and not from the jars.

5) The 6-40mL vials for the equipment blank will ship today.

Thank you !!

13013 1248313 G2906495-97

CHAIN OF CUSTODY RECORD

CDM	SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS								SS ONLY				
NOTES: *Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels $ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected						*Metals EPA 6010/6020&7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Methyl Mercury EPA Method 1630	**Organotin NOAA Status&Trends	Other Instructions and Notes Amended COC
Samplers Signatures:																		
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers													
SED-035-SIV-SDMS	5.23.11	1500	WET SOIL	NONE	4-8 oz. Poly											X		MS/MSD sample
SED-035-SIV-SDMS	5.23.11	1500	WET SOIL	NONE	4-8 oz. Jars												X	MS/MSD sample
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	3-16 oz. Jars	X	X	X	X	X	X	X	X	X	X			
DUP03-SIV-QC-052311	5.23.11	1510	WET SOIL	NONE	1-8 oz. Poly											X		
DUP03-SIV-QC-052311	5.23.11	1510	WET SOIL	NONE	1-8 oz. Jars												X	
FB08-SIV-052311	5.23.11	1600	WATER	NONE	1-L Amber											X		
FB08-SIV-052311	5.23.11	1600	WATER	NONE	1-L Amber												X	
Relinquished by: (*Signature*)	Date/Time 05/23/2011 / 1700		Received for Laboratory by: (*Signature*)															Laboratory: Lancaster Laboratories, Inc.
Received by: (*Signature*)	Date/Time		Airbill No.(s) 8695 1441 7961, 7994, 8008,7972, 7983															

FRONTIER™
GLOBAL SCIENCES
414 Pontius Ave. N. Seattle, WA 98109
www.frontiergs.com | 206.622.6960

Report to
Lancaster Labs, Inc.

Table of Contents

July 6, 2011

Frontier Global Sciences Inc.
414 Pontius Ave. N
Seattle, WA 98109

Section	Page Number
Table of Contents	1
Sample Summary	3
Case Narrative	4
Chain of Custody Forms	6
Results Summary	8
MD/MS/MSD Summary	10
Laboratory Control Sample Summary	18
Preparation Initial and Continuing Calibration Blank Summary	20
Initial and Continuing Calibration Verification Summary	24
Notes and Definitions	26
Raw Data: Methylmercury (CV-GC-AFS) 1F01010	27
Raw Data: Methylmercury (CV-GC-AFS) 1F01012	44
Raw Data: Total Solids F105379	64

Total Pages - 69

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

06 July 2011

Elizabeth Leonhardt
Lancaster Labs, Inc.
2425 New Holland Pike, PO Box 12425
Lancaster, PA 17605-2425

RE: Methyl Mercury Analysis

Enclosed are the analytical results for samples received by Frontier Global Sciences. All quality control measurements are within established control limits and there were no analytical difficulties encountered with the exception of those listed in the case narrative section of this report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Cindy Fields

Cindy Fields
Project Manager

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

ANALYTICAL REPORT FOR SAMPLES

Laboratory: Frontier Global Sciences, Inc. **SDG:**

Client: Lancaster Labs, Inc. **Project:** Methyl Mercury Analysis

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SED-035-SIV-SDMS	1105316-01	Soil/Sediment	23-May-11 15:00	25-May-11 09:41
DUP03-SIV-QC-052311	1105316-02	Soil/Sediment	23-May-11 15:10	25-May-11 09:41
FB08-SIV-052311	1105316-03	Water	23-May-11 16:00	25-May-11 09:41

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

CASE NARRATIVE

Work Order Number: 1105316:

SAMPLE RECEIPT
One (1) water and four (4) soil samples were received at Frontier Global Sciences, Inc. (Frontier) on May 25, 2011 for methyl mercury analysis. The water sample and two of the sediment samples (in amber glass jars) were labeled for organotin analysis. The two sediment samples received in polypropylene (PP) jars for methyl mercury were both labeled as 6296495. These two 250mL PP jars were entered into FGS LIMS as 1105316-01A and 1105316-01B. The duplicate sample was not received in the shipment.

These samples were received in a sealed cooler with a temperature of 0.7°C degrees Celsius. Upon request, the sediment samples in amber glass, labeled for organotin analysis, were placed in a sealed cooler, on ice, and shipped to Test America, Vermont for overnight delivery. Delivery was confirmed on May 26, 2011.

The water sample was pH tested and then preserved to 0.4% (v/v) with concentrated hydrochloric acid.

On May 27, 2011, Frontier received one additional container for SED-035 (labeled SED-035 by the client on their label and 6246498 by Lancaster) and the duplicate (labeled as DUP on the client label and 6296499 by Lancaster). These samples were received in a sealed cooler with a temperature of 0.2°C degrees Celsius. The additional container for SED-035 was labeled as 1105316-01C. The container received for DUP was labeled as 1105316-02A.

On June 2, the sample IDs were updated per the client's request as follows:
SED-035-SIV-SD became SED-035-SIV-SDMS
DUP01-SIV-SD became DUP03-SIV-QC-052311
FB07-SIV-SS-052311 became FB08-SIV-052311

SAMPLE PREPARATION
Water samples were distilled under nitrogen at 120 °C in the presence of ammonium pyrrolidine dithiocarbamate, according to EPA 1630 (Standard Operating Procedure (SOP) FGS-013) prior to analysis.

Soil samples were extracted according to SOP FGS-045 prior to analysis. Samples were vigorously shaken for one hour with methylene chloride, acidic potassium bromide (KBr) and copper sulfate solutions. After centrifugation and removal of the aqueous layer, an aliquot of methylene chloride was added to water and purged with nitrogen for approximately thirty minutes to remove the methylene chloride. The sample, now in the aqueous phase, was brought to final volume with reagent water.

SAMPLE ANALYSIS
Methyl mercury was analyzed in distilled/extracted samples by cold vapor gas chromatography atomic fluorescence spectrometry (CV-GC-AFS) according to EPA method 1630 (FGS-070).

ANALYTICAL AND QUALITY CONTROL ISSUES
The extracted sediment certified reference material (CRM) had a recovery below the lower control limit of 80%, at 35.5%. The low recovery of the extract was confirmed by reanalysis (using different component combinations to investigate hardware failure). The sample extract was repurged (an aliquot of methylene chloride was added to water and purged with nitrogen for approximately thirty minutes to remove the methylene chloride) and reanalyzed with acceptable results. As the CRM duplicate (F105376-BSD1) and other batch QC samples (F105376-MS/MSD1, F105376-MS/MSD2, F105376-MS/MSD3 and F105376-DUP1) were all within control limits, no further action was

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

taken. The failing CRM data points have been excluded from this report.

There were no additional analytical difficulties and all quality control analyses were within acceptable limits, except as noted in this report.

Please feel free to contact me if you have any questions or concerns.

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

CHAIN OF CUSTODY FORMS

FRONTIER GLOBAL SCIENCES

Chain of Custody Record & Laboratory Analysis Request: Air, Water, Sediments, Plant and Animal Tissue, Hydrocarbon & Other Samples

414 Pontius Ave. N. Seattle WA 98109
Phone: 206-622-6960
Fax: 206-622-6870
info@FrontierGS.com
http://www.FrontierGS.com

1105316 Page ___ of ___

Client: Lancaster Laboratories	Contact: Nicole Maljovec
Address: 2425 New Holland Pike Lancaster, PA 17601	Phone:717-656-2300x1537 E-mail:NMaljovec@lancasterlabs.com
Project Name: SSFL Area IV Co-located Sampling	Contract/PO:
Report To: Kathy Binkley	Invoice To: Kathy Binkley
Address: Same as above	Address: Same as above
Phone: Fax:	Phone: Fax:
E-mail: kbinkley@lancasterlabs.com	E-mail: kbinkley@lancasterlabs.com

FGS PM:
Date:
TAT (business days): **20** (std) **15 10 5 4 3 2 24 hrs.** (For TAT < 10 days, contact PM. Surcharges apply for expedited TAT)
Saturday delivery? ☐ Y ☐N (If yes, please contact PM)
EDD ☐ Y ☐ N
QA ☐ Standard ☐ High

No.	Engraved Bottle ID	Sample ID	# of Bottles	Matrix	Date & Time	Sampled By	Field Filtered (Y/N)	Field Preserved: HNO_3 HCl BrCl Other (%)	Analyses Requested: Methyl Mercury	Comments
1	6296495	SED-035-SIV-SD Grab		Soil	05/23/11 15:00				X	
2	6296496 95 *	DUP01-SIV-SD Grab		Soil	05/23/11 15:10				X	
3	6296497	FB07-SIV-SS-052311 Grab		Water	05/23/11 16:00				X	
4										
5										
6										
7										
8										
9										
10										
11										
12										

For Laboratory Use Only

COC Seal: N/A
Cooler Temp: 0.7°C
Carrier: Fedex
VTSR: 0941
# of Coolers: 1
Comments: TID 0268 *Bottle ID incorrect on COC.

Matrix Codes:
FW: Fresh Water
WW: Waste Water
SB: Sea and Brackish Water
SS: Soil and Sediment
TS: Plant and Animal Tissue
HC: Hydrocarbons
TR: Trap
OT: Other

Relinquished By:	Received By:	Received By:
Name: Nicole Maljovec	Name: Owen Valentine	Name:
Organization: LLI	Organization: FGS	Organization:
Date & Time: 5/24/11 1619	Date & Time: 5/25/11 1143	Date & Time:

Tracking number: 4187 8635 6400

Sample Disposal:
☐ Return (shipping fees may apply)
☐ Standard Disposal – 30 Days after report
☐ Retain for ____ weeks after report (storage fees may apply)

By signing, you declare that you agree with FGS' terms and conditions, and that you authorize FGS to perform the specified analyses.

Customer Approval: _____ Date: 5/24/11

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

FRONTIER™ GLOBAL SCIENCES

CHAIN OF CUSTODY FORMS

Lancaster Laboratories

Analysis Request / Environmental Services Subcontracting Form

For Lancaster Laboratories Use Only

Acct: 13013 Group No.: 1248314 Sample Nos.: 6296498-500 Date: 5/24/2011

1105352

Subcontractor: TEST AMERICA - BURLINGTON

LLI P.O.# : Courier: Fed Ex

Submit report to: Kathy Binkley Ext.: 1393

Submit invoice to: Kathy Binkley

State where samples were collected: CA

Matrix: ☐ Potable ☐ NPDES

Analyses Requested / Preservation Codes

Preservation Codes: H=HCl T=Thiosulfate N=HNO_3 B=NaOH S=H_2SO_4 O=Other

Comments: JWM

Sample Identification	Date Collected	Time Collected	Grab	Composite	Soil	Water	Other	Total # of Containers	~~organolin~~ MeHg											Temperature of samples upon receipt (if requested)
SED-035-SIV-SD	05/23/11	15:00	X		X			1	X		3 Jars		2	√ Jin						~~6296498~~ 1 MeHg
DUP01-SIV-SD	05/23/11	15:10	X		X			1	X											6296499
~~FB07-SIV-SS-052311~~	~~05/23/11~~	~~16:00~~	~~X~~			~~X~~			~~X~~		JWM		5/26/11							6296500

Turnaround Time Requested (TAT): Standard Rush

Date Results are Needed:

Email Results to: kbinkley@lancasterlabs.com

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	5/24/11	1015	[signature]	5/25/11	1015
[signature] TA Burlington	05/26/11	1600	[signature] Temp: 0.2°C Therm. #422 Fed Ex 4245 2053 1257 coc	5-27-11 Seal intact	1159 1752; 0938

Data Package Options (circled when required)
Type I (validation/NJ Reg) Type VI(Raw Data)
Type II (Tier II) Type III (Reduced NJ)
Type IV (CLP SOW) TX TRRP-13

SDG Complete? Yes No

MA MCP
CT RCP

Site-specific QC Required (MS/MSD/DUP)? Yes No
Internal Chain of Custody Required? Yes No

Lancaster Laboratories, Inc. 2425 New Holland Pike Lancaster, PA 17601 (717) 656-2300 Fax: (717) 656-6766

Copies: White copy should accompany samples to Lancaster Laboratories. The yellow copy should be retained by the samplers.

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

Methyl Mercury Analytical Results

Matrix: Soil/Sediment **Preparation:** Methylene Chloride Extraction for Methyl Hg

Sample Name	Result	MRL	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
SED-035-SIV-SDMS	**0.452**	0.133	µg/kg dry	1.05	F105376	05/30/11	1F01010	06/01/11	PA 1630 Mc	
DUP03-SIV-QC-052311	**0.275**	0.091	µg/kg dry	0.95	F105376	05/30/11	1F01010	06/01/11	PA 1630 Mc	

Matrix: Water **Preparation:** Methyl Hg Distillation for Water

Sample Name	Result	MRL	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
FB08-SIV-052311	ND	0.050	ng/L	1.25	F105371	05/30/11	1F01012	06/01/11	EPA 1630	U

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

% Solids Analytical Results

Matrix: Soil/Sediment **Preparation:** Solids Analysis

Sample Name	Result	MRL	Units	Dilution	Batch	Prepared	Sequence	Analyzed	Method	Notes
SED-035-SIV-SDMS	**44.2**	0.1	% by Weight	1	F105379	05/30/11		05/31/11	SM 2540B	O-09
DUP03-SIV-QC-052311	**58.2**	0.1	% by Weight	1	F105379	05/30/11		05/31/11	SM 2540B	O-09

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

MATRIX DUPLICATES/TRIPLICATES

SOURCE: 1105274-07

Matrix: Water
Sequence: 1F01012
Batch: F105371
Lab Number: F105371-DUP1
Preparation: Methyl Hg Distillation for Water

Analyte	Sample Concentration ng/L	Duplicate Concentration ng/L	MRL	% RPD	RPD Limit	Method	Notes
Methyl Mercury	0.110	0.166	0.050	40.7	25	EPA 1630	QR-07

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

MATRIX DUPLICATES/TRIPLICATES

SOURCE: 1105304-01

Matrix: Soil/Sediment
Sequence: 1F01010
Batch: F105376
Lab Number: F105376-DUP1
Preparation: Methylene Chloride Extraction for Methyl Hg

Analyte	Sample Concentration µg/kg dry	Duplicate Concentration µg/kg dry	MRL	% RPD	RPD Limit	Method	Notes
Methyl Mercury	2.046	2.456	0.112	18.2	25	EPA 1630 Mod	

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

MATRIX DUPLICATES/TRIPLICATES

SOURCE: 1105304-04

Matrix: Soil/Sediment
Sequence:
Batch: F105379
Lab Number: F105379-DUP1
Preparation: Solids Analysis

Analyte	Sample Concentration % by Weight	Duplicate Concentration % by Weight	MRL	% RPD	RPD Limit	Method	Notes
% Solids	47.4	49.9	0.1	5.14	10	SM 2540B	O-09

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

MATRIX DUPLICATES/TRIPLICATES

SOURCE: 1105274-01

Matrix: Soil/Sediment
Sequence:
Batch: F105379
Lab Number: F105379-DUP2
Preparation: Solids Analysis

Analyte	Sample Concentration % by Weight	Duplicate Concentration % by Weight	MRL	% RPD	RPD Limit	Method	Notes
% Solids	34.6	34.2	0.1	1.16	10	SM 2540B	O-09

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY AND RPD

SOURCE: 1105274-07

Matrix: Water
Sequence: 1F01012
Batch: F105371
Lab Number: F105371-MS/MSD1
Preparation: Methyl Hg Distillation for Water

Analyte	Sample Concentration (ng/L)	Spike Added (ng/L)	MS Concentration (ng/L)	MS % Recovery	Revovery Limits	Method	Notes
Methyl Mercury	0.110	2.0000	2.393	114	65 - 130	EPA 1630	

Analyte	Spike Added (ng/L)	MSD Concentration (ng/L)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Methyl Mercury	2.0000	2.345	112	2.01	65 - 130	25	EPA 1630	

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY AND RPD

SOURCE: 1105274-01

Matrix: Soil/Sediment
Sequence: 1F01010
Batch: F105376
Lab Number: F105376-MS/MSD1
Preparation: Methylene Chloride Extraction for Methyl Hg

Analyte	Sample Concentration (µg/kg dry)	Spike Added (µg/kg dry)	MS Concentration (µg/kg dry)	MS % Recovery	Revovery Limits	Method	Notes
Methyl Mercury	0.394	13.737	16.01	114	65 - 130	EPA 1630 Mod	

Analyte	Spike Added (µg/kg dry)	MSD Concentration (µg/kg dry)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Methyl Mercury	13.949	16.37	115	0.745	65 - 130	25	EPA 1630 Mod	

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY AND RPD

SOURCE: 1105304-04

Matrix: Soil/Sediment
Sequence: 1F01010
Batch: F105376
Lab Number: F105376-MS/MSD2
Preparation: Methylene Chloride Extraction for Methyl Hg

Analyte	Sample Concentration (µg/kg dry)	Spike Added (µg/kg dry)	MS Concentration (µg/kg dry)	MS % Recovery	Revovery Limits	Method	Notes
Methyl Mercury	3.332	9.9140	13.23	99.9	65 - 130	EPA 1630 Mod	

Analyte	Spike Added (µg/kg dry)	MSD Concentration (µg/kg dry)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Methyl Mercury	10.008	13.36	100	0.316	65 - 130	25	EPA 1630 Mod	

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY AND RPD

SOURCE: 1105316-01

Matrix: Soil/Sediment
Sequence: 1F01010
Batch: F105376
Lab Number: F105376-MS/MSD3
Preparation: Methylene Chloride Extraction for Methyl Hg

Analyte	Sample Concentration (µg/kg dry)	Spike Added (µg/kg dry)	MS Concentration (µg/kg dry)	MS % Recovery	Revovery Limits	Method	Notes
Methyl Mercury	0.359	10.898	12.09	108	65 - 130	EPA 1630 Mod	

Analyte	Spike Added (µg/kg dry)	MSD Concentration (µg/kg dry)	MSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Methyl Mercury	10.983	11.92	105	2.25	65 - 130	25	EPA 1630 Mod	

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

LABORATORY CONTROL SAMPLE/ LABORATORY CONTROL SAMPLE DUPLICATE

RECOVERY AND RPD

Matrix: Water
Sequence: 1F01012
Batch: F105371
Lab Number: F105371-BS/BSD1
Preparation: Methyl Hg Distillation for Water
LCS Source: Blank Spike

Analyte	Spike Added (ng/L)	LCS Concentration (ng/L)	LCS % Recovery	Revovery Limits	Method	Notes
Methyl Mercury	2.0000	2.119	106	70 - 130	EPA 1630	

Analyte	Spike Added (ng/L)	LCSD Concentration (ng/L)	LCSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Methyl Mercury	2.0000	2.238	112	5.47	70 - 130	25	EPA 1630	

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

LABORATORY CONTROL SAMPLE/ LABORATORY CONTROL SAMPLE DUPLICATE

RECOVERY AND RPD

Matrix: Soil/Sediment **Sequence:** 1F01010

Batch: F105376 **Lab Number:** F105376-BS/BSD1

Preparation: Methylene Chloride Extraction for Methyl Hg **LCS Source:** IAEA-405

Analyte	Spike Added (µg/kg wet)	LCS Concentration (µg/kg wet)	LCS % Recovery	Revovery Limits	Method	Notes
Methyl Mercury	5.3802	5.378	100	70 - 130	EPA 1630 Mod	

Analyte	Spike Added (µg/kg	LCSD Concentration (µg/kg wet)	LCSD % Recovery	% RPD	Recovery Limits	RPD Limit	Method	Notes
Methyl Mercury	5.3802	5.766	107	6.96	70 - 130	25	EPA 1630 Mod	

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

PREPARATION BLANKS

Matrix: Soil/Sediment **Sequence:** 1F01010

Instrument: Hg-07 **Preparation:** Methylene Chloride Extraction for Methyl Hg

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
F105376-BLK1	Methyl Mercury	0.001	0.050	µg/kg wet	F105376	EPA 1630 Mod	U
F105376-BLK2	Methyl Mercury	0.003	0.050	µg/kg wet	F105376	EPA 1630 Mod	U
F105376-BLK3	Methyl Mercury	0.004	0.050	µg/kg wet	F105376	EPA 1630 Mod	U

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

INITIAL AND CONTINUING CALIBRATION BLANKS

Matrix: Soil/Sediment **Sequence:** 1F01010

Instrument: Hg-07 **Preparation:** No Preparation

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
1F01010-ICB1	Methyl Mercury	0.003	0.101	ng/L	1F01010	EPA 1630 Mod	
1F01010-CCB1	Methyl Mercury	-0.0008	0.101	ng/L	1F01010	EPA 1630 Mod	U
1F01010-CCB2	Methyl Mercury	0.0006	0.101	ng/L	1F01010	EPA 1630 Mod	
1F01010-CCB3	Methyl Mercury	-0.002	0.101	ng/L	1F01010	EPA 1630 Mod	U
1F01010-CCB4	Methyl Mercury	-0.0008	0.101	ng/L	1F01010	EPA 1630 Mod	U

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

PREPARATION BLANKS

Matrix: Water **Sequence:** 1F01012

Instrument: Hg-15 **Preparation:** Methyl Hg Distillation for Water

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
F105371-BLK1	Methyl Mercury	-0.002	0.050	ng/L	F105371	EPA 1630	U
F105371-BLK2	Methyl Mercury	0.004	0.050	ng/L	F105371	EPA 1630	U
F105371-BLK3	Methyl Mercury	-0.0006	0.050	ng/L	F105371	EPA 1630	U

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

INITIAL AND CONTINUING CALIBRATION BLANKS

Matrix: Water **Sequence:** 1F01012

Instrument: Hg-15 **Preparation:** No Preparation

Lab Sample ID	Analyte	Found	MRL	Units	Batch	Method	Notes
1F01012-ICB1	Methyl Mercury	-0.0004	0.045	ng/L	1F01012	EPA 1630	U
1F01012-CCB1	Methyl Mercury	0.0004	0.045	ng/L	1F01012	EPA 1630	
1F01012-CCB2	Methyl Mercury	-0.0004	0.045	ng/L	1F01012	EPA 1630	U
1F01012-CCB3	Methyl Mercury	0.0004	0.045	ng/L	1F01012	EPA 1630	

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Instrument ID: Hg-07 **Sequence:** 1F01010

Lab Sample ID	Analyte	True ng/L	Found ng/L	% Recovery	Control Limits	Method	Notes
1F01010-ICV1	Methyl Mercury	2.0000	1.787	89.3	80 - 120%	EPA 1630 Mod	
1F01010-CCV1	Methyl Mercury	2.0000	2.248	112	75 - 125%	EPA 1630 Mod	
1F01010-CCV2	Methyl Mercury	2.0000	2.025	101	75 - 125%	EPA 1630 Mod	
1F01010-CCV3	Methyl Mercury	2.0000	2.095	105	75 - 125%	EPA 1630 Mod	
1F01010-CCV4	Methyl Mercury	2.0000	2.039	102	75 - 125%	EPA 1630 Mod	

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Instrument ID: Hg-15 **Sequence:** 1F01012

Lab Sample ID	Analyte	True ng/L	Found ng/L	% Recovery	Control Limits	Method	Notes
1F01012-ICV1	Methyl Mercury	2.0000	1.742	87.1	80 - 120%	EPA 1630	
1F01012-CCV1	Methyl Mercury	2.0000	2.113	106	75 - 125%	EPA 1630	
1F01012-CCV2	Methyl Mercury	2.0000	2.027	101	75 - 125%	EPA 1630	
1F01012-CCV3	Methyl Mercury	2.0000	1.897	94.9	75 - 125%	EPA 1630	

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

414 Pontius Ave North
Seattle, WA 98109
Ph: 206-622-6960
Fx: 206-622-6870

Notes and Definitions

U	Analyte included in the analysis, but not detected
QR-07	The RPD/RSD value for the matrix duplicate/triplicate was outside of acceptance limits. Batch QC acceptable based on MS/MSD and/or LCS/LCSD RPD values within control limits.
O-09	Total Solids are prepared at the same time as the preparation for the analyte(s) of interest in order to provide the most accurate dry mass correction.
O-04	This sample was analyzed outside of the recommended holding time.
DET	Analyte Detected
MRL	Minimum Reporting Limit
ND	Analyte Not Detected at or above the reporting limit
wet	Sample results reported on a wet weight basis
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
RSD	Relative Standard Deviation

Frontier Global Sciences, Inc.

Cindy Fields

Cindy Fields, Project Manager

The results in this report only apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Frontier Global Sciences, Inc
High QA Report: MHg CV AFS
Analyst: Adela Blaga
Sequence: 1F01010 (MHg07-110601-1), Batch F105376
Reviewer: Lucas Knowles
Reviewed Date: 6/9/2011 LMK 6/10/11

Client(s): Lancaster Labs (WO# 1105316)

Client specific QC: See WO.

(1) Calibration was performed on at least five calibration standards.
- There were five standards analyzed for the calibration curve and all five points were included in the curve.
- For the low calibration standard, 0.05 ng, recovery was 107%.

(2) The calibration curve used at least five standards and achieved an RSD CF ≤15%.
- Yes: 11.2%

(3) All LCS have %Rec within 70-130%.
- F105376-BS1/BSD1 (IAEA-405, LIMS# 0800436) were analyzed with recoveries of 100% and 107%. The initial BS (Trap 5 and Bubbler 4) failed recovery and was renamed BS2 and set to do not report. A trap and bubbler test was preformed as BS3 and BS4 and both failed recovery. A re-purge was perform from the original extraction and passed. Passing BS was named BS1 and reported.

(4) LCS/CRM RPD < 25%.
- The RPD between BS1 and BSD1 was 6.96%.

(5) All sample MS and MSD have %Rec within 65-130% unless spike concentration is less than 1x the ambient concentration.
- F105376-MS1 and MSD1 were analyzed on 1105274-01, and the recoveries were 114% and 115% with an RPD of 0.745%.
- F105376-MS2 and MSD2 were analyzed on 1105304-04, and the recoveries were 99.9% and 100% with an RPD of 0.316%.
- F105376-MS3 and MSD3 were analyzed on 1105316-01, and the recoveries were 108% and 105% with an RPD of 2.25%.

(6) All ICB & CCB < 0.025 ng/L
- Yes: 0.005 ± 0.002

(7) PB < PQL (0.05 ng/L)
- Prep blank frequency: Three preparation blanks were analyzed, and all results were below the PQL. The mean of the three blanks was 0.005 ng/L.

(8) MD RPD/MT RSD < 25%.
- F105376-DUP1: Sample 1105304-01 was analyzed in duplicate. RPD was 18.2%.

(9) MS/MSD RPD < 25%.
- In control, see 5.

(10) ICV (80-120%) and CCVs (75-125%) % recoveries are within control limits.
- One ICV and four CCVs were run at a 2.000 ng/L concentration. Recovery results were 89.3%, 112%, 101%, 105% and 102%.

(11) All reported samples are within standard calibration range.
- All samples on WO 1105316 were within calibration range or analyzed at the maximum aliquot size.

Frontier Global Sciences, Inc
High QA Report: MHg CV AFS
Analyst: Adela Blaga
Sequence: 1F01010 (MHg07-110601-1), Batch F105376
Reviewer: Lucas Knowles
Reviewed Date: 6/9/2011

-Peer Reviewer checked transcriptions and calculations.

Follow-up items:
Email correspondence among the QA coordinator, lab manager, AL group leader, and PM group leader detailing qualifications or corrective actions may be appended to this report.

All analytical issues or other problems:

- None.

I, LMK 6/9/11

MMHg07-150601-1

Frontier GeoSciences, Inc.

Analysis Datasheet for Methyl Mercury in Solids

Date of Analysis: 6/1/11 | Analyst: LS | Time Begin: 10:01 | Sample Count: 51

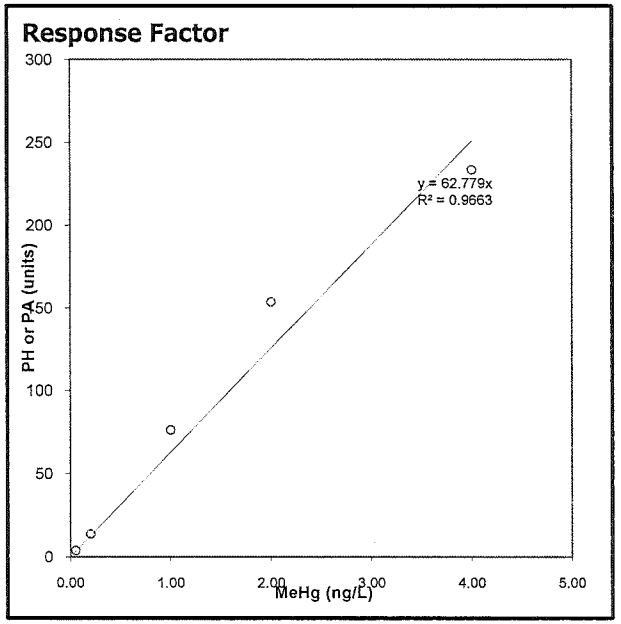
Instrument #: Hg-07 | Units ng/L | Time End 19:28

LIMS Sequence #: 1F01010

Calibration Statistics:

LabNumber	n	True Val	Peak Height or Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	4.20 units	84.00	3.84 units	76.80	107.5 %Rec
SEQ-CAL2	1	1.00 ng/L	76.60 units	76.60	76.24 units	76.24	106.7 %Rec
SEQ-CAL3	1	2.00 ng/L	154.00 units	77.00	153.64 units	76.82	107.5 %Rec
SEQ-CAL4	1	4.00 ng/L	234.00 units	58.50	233.64 units	58.41	81.8 %Rec
SEQ-CAL5	1	0.20 ng/L	14.15 units	70.75	13.79 units	68.95	96.5 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF	Corr. St Dev RF	Corr. RSD CF	Uncorr. Mean RF
71.44	+/- 8.01	11.2% RSD	73.37



Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-ICB					
SEQ-CCB					
SEQ-IBL	5	0.36 units	±0.15	0.005 ng/L	±0.002

Preparation Blanks

Sample Type	Group ID	n	Mean	Std Dev
BLK	1	3	0.005 ng/L	±0.003
BLK	2	0	0.000 ng/L	
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	

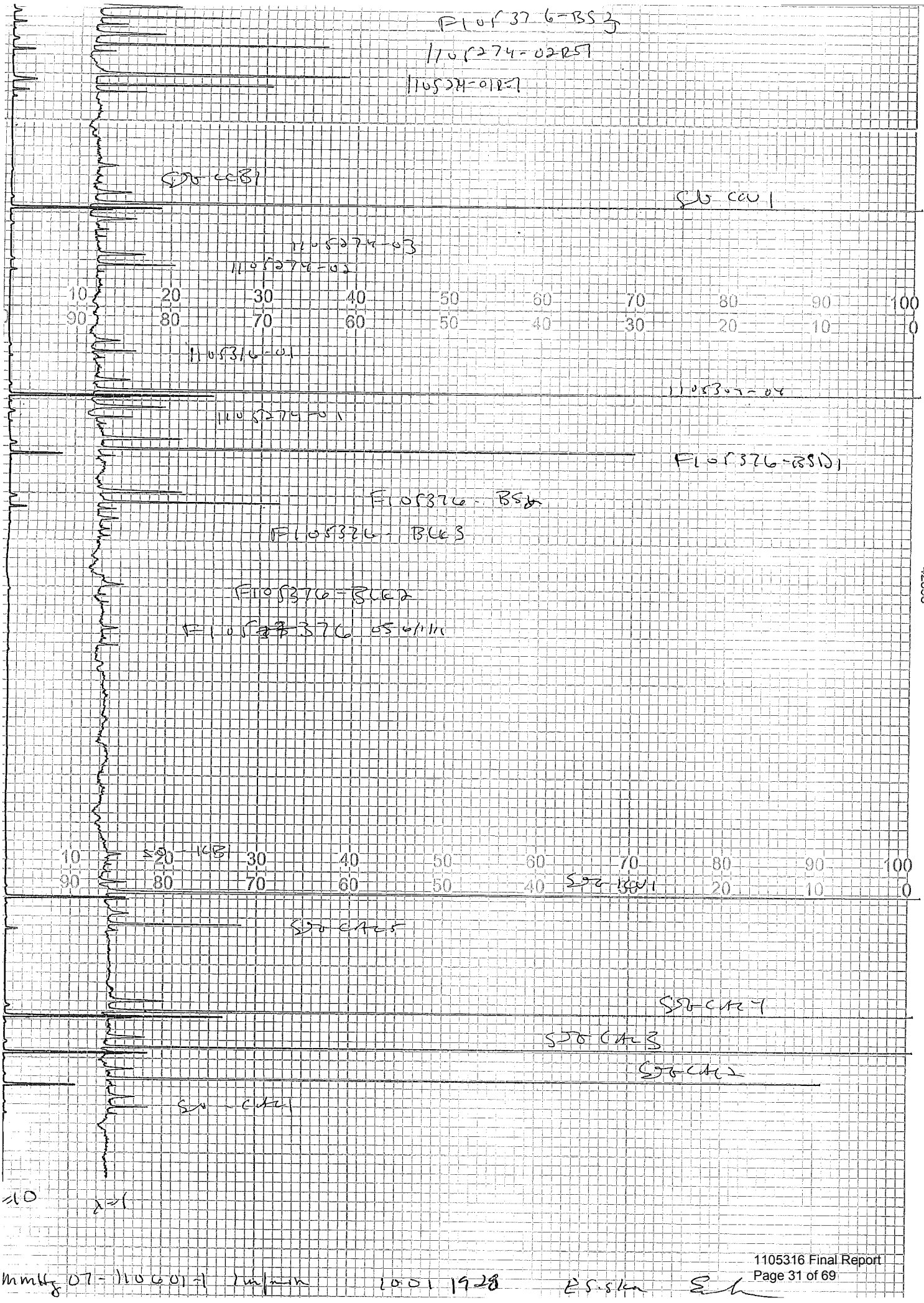
QUALITY ASSURANCE REVIEWED

INITIALS: LMK 6/10/11

QUALITY ASSURANCE
PEER-REVIEWED

INITIALS: pc 6/8/11

FileID	Instrument	Analyst	Analyzed	Tp	Bub	Sample Type	LabNumber	Aliquot Volume	Instrumental Conc.	Group ID	No PB Correction?	Uncorrected PH	Instrumental Dilution	RESP	Dilution	InitialResult	FinalResult	InitialUnits	Comments
0701	Hg-07	LS	6/1/11 10:01	1	1	CAL	SEQ-CAL1	50.000 mL	0.003 ng			4.2		3.8	1.00	0.0537	0.0537	ng/L	
0702	Hg-07	LS	6/1/11 10:12	3	2	CAL	SEQ-CAL2	50.000 mL	0.053 ng			76.6		76.2	1.00	1.0671	1.0671	ng/L	
0703	Hg-07	LS	6/1/11 10:23	4	3	CAL	SEQ-CAL3	50.000 mL	0.108 ng			154.0		153.6	1.00	2.1505	2.1505	ng/L	
0704	Hg-07	LS	6/1/11 10:34	5	4	CAL	SEQ-CAL4	50.000 mL	0.164 ng			234.0		233.6	1.00	3.2703	3.2703	ng/L	
0705	Hg-07	LS	6/1/11 10:45	6	1	CAL	SEQ-CAL5	50.000 mL	0.010 ng			14.2		13.8	1.00	0.1930	0.1930	ng/L	
0706	Hg-07	LS	6/1/11 10:56	7	2	CAL	SEQ-ICV1	50.000 mL	0.089 ng			128.0		127.6	1.00	1.7866	1.7866	ng/L	89.3 %Rec
0707	Hg-07	LS	6/1/11 11:07	8	3	CAL	SEQ-ICB1	50.000 mL	0.000 ng			0.6		0.2	1.00	0.0034	0.0034	ng/L	
0708	Hg-07	LS	6/1/11 11:18	1	1	BLK	F105376-BLK1	57.600 mL	0.000 ng	1		0.5		0.1	0.87	0.0020	0.0017	ng/L	
0709	Hg-07	LS	6/1/11 11:29	3	2	BLK	F105376-BLK2	57.600 mL	0.000 ng	1		0.8		0.4	0.87	0.0062	0.0053	ng/L	
0710	Hg-07	LS	6/1/11 11:41	4	3	BLK	F105376-BLK3	57.600 mL	0.000 ng	1		1.0		0.6	0.87	0.0090	0.0078	ng/L	
0711	Hg-07	LS	6/1/11 11:52	5	4	SAM	F105376-BS2	10.000 mL	0.013 ng	1		19.4		19.0	5.00	0.2655	1.3276	ng/L	35.5 %Rec
0712	Hg-07	LS	6/1/11 12:03	6	1	SAM	F105376-BSD1	10.000 mL	0.040 ng	1		57.7		57.3	5.00	0.8009	4.0045	ng/L	107.2 %Rec
0713	Hg-07	LS	6/1/11 12:14	7	2	SAM	*1105274-01	10.000 mL	0.003 ng	1		4.0		3.6	5.00	0.0500	0.2498	ng/L	RR#0720
0714	Hg-07	LS	6/1/11 12:25	8	3	SAM	1105304-04	52.600 mL	0.154 ng	1		220.0		219.6	0.95	3.0691	2.9174	ng/L	
0715	Hg-07	LS	6/1/11 12:36	1	4	SAM	*1105316-01	10.000 mL	0.003 ng	1		4.5		4.1	5.00	0.0570	0.2848	ng/L	RR#0721
0716	Hg-07	LS	6/1/11 12:47	3	1	SAM	*1105274-02	10.000 mL	0.006 ng	1		8.5		8.1	5.00	0.1129	0.5647	ng/L	
0717	Hg-07	LS	6/1/11 12:58	4	2	SAM	*1105274-03	10.000 mL	0.001 ng	1		1.2		0.8	5.00	0.0108	0.0538	ng/L	
0718	Hg-07	LS	6/1/11 13:10	6	3	CAL	SEQ-CCV1	50.000 mL	0.112 ng			161.0		160.6	1.00	2.2485	2.2485	ng/L	112.4 %Rec
0719	Hg-07	LS	6/1/11 13:21	7	4	CAL	SEQ-CCB1	50.000 mL	0.000 ng			0.3		-0.1	1.00	-0.0008	-0.0008	ng/L	
0720	Hg-07	LS	6/1/11 13:32	8	1	SAM	1105274-01RE1	47.600 mL	0.013 ng	1		19.0		18.6	1.05	0.2562	0.2691	ng/L	
0721	Hg-07	LS	6/1/11 13:43	1	2	SAM	1105316-01RE1	47.600 mL	0.017 ng	1		25.1		24.7	1.05	0.3416	0.3588	ng/L	
0722	Hg-07	LS	6/1/11 13:54	5	3	SAM	F105376-BS3	10.000 mL	0.010 ng	1		15.0		14.6	5.00	0.2039	1.0196	ng/L	
0723	Hg-07	LS	6/1/11 14:05	3	4	SAM	F105376-BS4	10.000 mL	0.013 ng	1		18.6		18.2	5.00	0.2543	1.2716	ng/L	
0724	Hg-07	LS	6/1/11 14:16	4	1	SAM	F105376-DUP1	47.600 mL	0.111 ng	1		159.0		158.6	1.05	2.2158	2.3275	ng/L	
0725	Hg-07	LS	6/1/11 14:27	6	2	SAM	F105376-MS2	10.000 mL	0.116 ng	1		166.0		165.6	5.00	2.3175	11.5874	ng/L	
0726	Hg-07	LS	6/1/11 14:38	7	3	SAM	F105376-MSD2	10.000 mL	0.116 ng	1		166.0		165.6	5.00	2.3175	11.5874	ng/L	
0727	Hg-07	LS	6/1/11 14:50	8	4	SAM	1105304-01	10.000 mL	0.020 ng	1		29.0		28.6	5.00	0.3999	1.9994	ng/L	
0728	Hg-07	LS	6/1/11 15:01	1	1	SAM	1105304-02	10.000 mL	0.033 ng	1		47.0		46.6	5.00	0.6518	3.2592	ng/L	
0729	Hg-07	LS	6/1/11 15:12	3	2	SAM	1105304-03	10.000 mL	0.030 ng	1		43.3		42.9	5.00	0.5993	2.9967	ng/L	
0730	Hg-07	LS	6/1/11 15:23	4	3	CAL	SEQ-CCV2	50.000 mL	0.101 ng			145.0		144.6	1.00	2.0245	2.0245	ng/L	101.2 %Rec
0731	Hg-07	LS	6/1/11 15:34	4	4	CAL	SEQ-CCB2	50.000 mL	0.000 ng			0.4		0.0	1.00	0.0006	0.0006	ng/L	
0732	Hg-07	LS	6/1/11 15:45	5	1	SAM	F105376-MS1	10.000 mL	0.101 ng	1		145.0		144.6	5.00	2.0235	10.1177	ng/L	
0733	Hg-07	LS	6/1/11 15:56	6	2	SAM	F105376-MSD1	10.000 mL	0.102 ng	1		146.0		145.6	5.00	2.0375	10.1877	ng/L	
0734	Hg-07	LS	6/1/11 16:07	7	3	SAM	F105376-MS3	10.000 mL	0.096 ng	1		138.0		137.6	5.00	1.9256	9.6278	ng/L	
0735	Hg-07	LS	6/1/11 16:19	8	4	SAM	F105376-MSD3	10.000 mL	0.094 ng	1		135.0		134.6	5.00	1.8836	9.4178	ng/L	
0736	Hg-07	LS	6/1/11 16:30	1	1	SAM	*1105304-05	10.000 mL	0.003 ng	1		4.6		4.2	5.00	0.0584	0.2918	ng/L	RR#0748
0737	Hg-07	LS	6/1/11 16:41	3	2	SAM	1105304-06	10.000 mL	0.008 ng	1		11.8		11.4	5.00	0.1591	0.7957	ng/L	
0738	Hg-07	LS	6/1/11 16:52	4	3	SAM	1105316-02	52.600 mL	0.015 ng	1		22.5		22.1	0.95	0.3047	0.2896	ng/L	
0739	Hg-07	LS	6/1/11 17:03	5	4	SAM	1105343-01	10.000 mL	0.012 ng	1		17.0		16.6	5.00	0.2319	1.1596	ng/L	
0740	Hg-07	LS	6/1/11 17:14	6	1	SAM	F105376-BS1	10.000 mL	0.037 ng	1		53.8		53.4	5.00	0.7470	3.7351	ng/L	
0741	Hg-07	LS	6/1/11 17:25	7	2	SAM	1105343-02	10.000 mL	0.003 ng	1		4.0		3.6	5.00	0.0500	0.2498	ng/L	
0742	Hg-07	LS	6/1/11 17:36	8	3	CAL	SEQ-CCV3	50.000 mL	0.105 ng			150.0		149.6	1.00	2.0945	2.0945	ng/L	104.7 %Rec
0743	Hg-07	LS	6/1/11 17:47	1	4	CAL	SEQ-CCB3	50.000 mL	0.000 ng			0.2		-0.2	1.00	-0.0022	-0.0022	ng/L	
0744	Hg-07	LS	6/1/11 17:59	3	1	SAM	1105343-03	20.000 mL	0.010 ng	1		15.1		14.7	2.50	0.2043	0.5108	ng/L	
0745	Hg-07	LS	6/1/11 18:10	4	2	SAM	1105344-01	20.000 mL	0.045 ng	1		65.0		64.6	2.50	0.9028	2.2570	ng/L	112.8 %Rec
0746	Hg-07	LS	6/1/11 18:21	5	3	SAM	1105274-02RE1	47.600 mL	0.031 ng	1		44.1		43.7	1.05	0.6075	0.6382	ng/L	
0747	Hg-07	LS	6/1/11 18:32	6	4	SAM	1105274-03RE1	47.600 mL	0.003 ng	1		5.0		4.6	1.05	0.0602	0.0633	ng/L	
0748	Hg-07	LS	6/1/11 18:43	7	1	SAM	1105304-05RE1	47.600 mL	0.014 ng	1		21.1		20.7	1.05	0.2849	0.2993	ng/L	
0749	Hg-07	LS	6/1/11 18:54	8	2	SAM	1105343-02RE1	47.600 mL	0.010 ng	1		15.2		14.8	1.05	0.2030	0.2132	ng/L	
0750	Hg-07	LS	6/1/11 19:05	1	3	CAL	SEQ-CCV4	50.000 mL	0.102 ng			146.0		145.6	1.00	2.0385	2.0385	ng/L	
0751	Hg-07	LS	6/1/11 19:16	3	4	CAL	SEQ-CCB4	50.000 mL	0.000 ng			0.3		-0.1	1.00	-0.0008	-0.0008	ng/L	



42598

mmHg 07-110601-1 1m/min 1001 1928 E.S.Ska

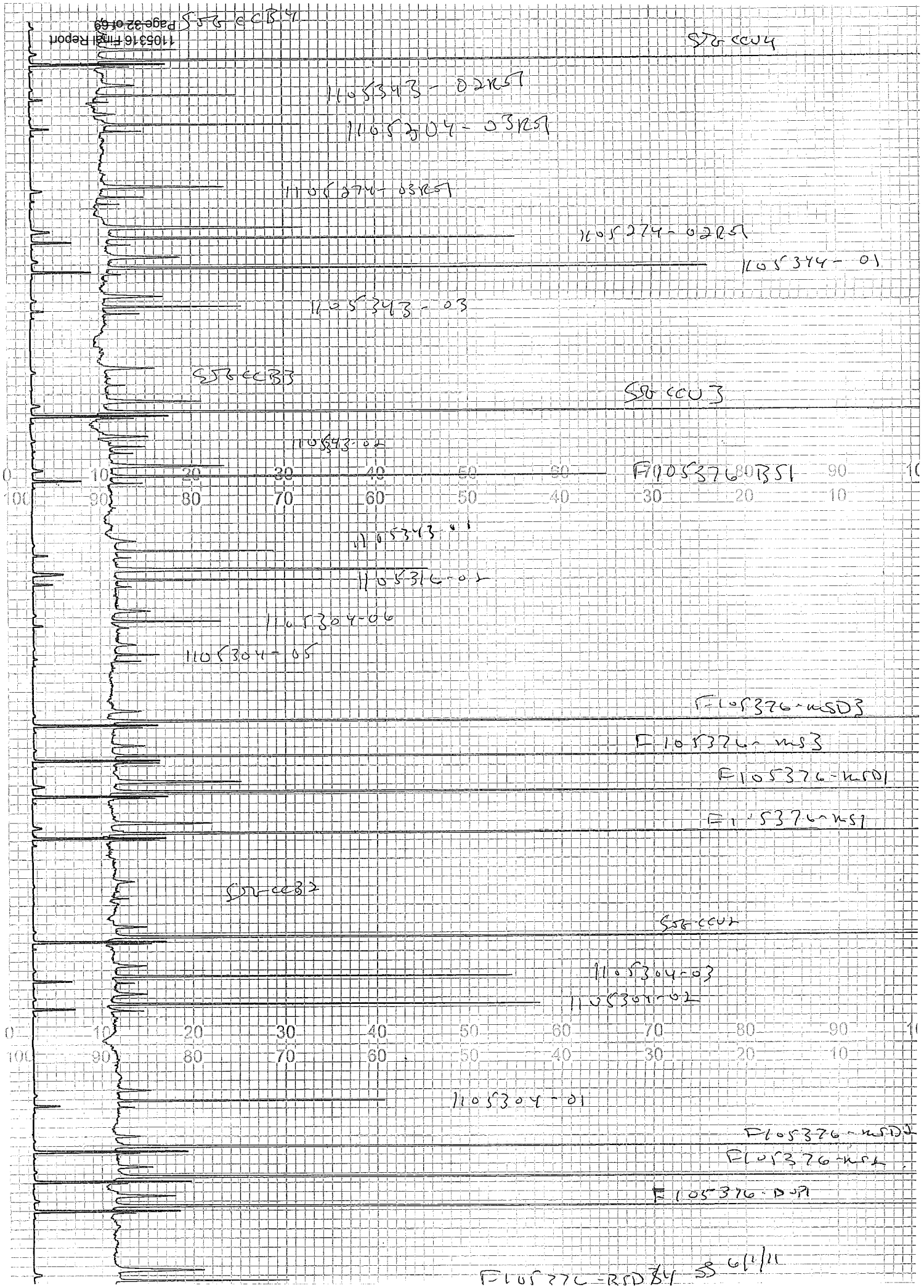


CHART NO. KZ - XR 9

FRONTIER GLOBAL SCIENCES

Peer Review Check List for MHg for CV-GC-AFS (FGS-070.3)

Analyst:	Liz Siska	**Sequence #:**	PL 6/7/11 1F01012 10
Reviewer:	Maryanne Lamy	**Dataset ID #:**	MMHg07-110601-1
Date:	6/1/2011 6/7/11	**WO #:**	1105274, 1105304, 1105316, 1105343, 1105344
Batch #(s):	F105376	**Client(s):**	[redacted]

- **Select the correct preparation method.**

Analyte	Prep Method		Matrix	PQL
☐ MHg	FGS-013	MHg Distillation	Water	0.05 ng/L 0.05 ng/L
☐ MHg	FGS-010	KOH/MeOH Digest	Tissue	4 ng/g
☑ MHg	FGS-045	MeCl Extraction	Sed/Soil	0.050 ng/g
☐ DMHg	FGS-098.1(Not Approved for use in AL lab)		ALL	

	Analyst Initilals: GL			Reviewer Initials PL
1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	☑ YES	☐ NO		☑
2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	☑ YES	☐ NO		☑
(a) Reviewer: 100% of peak heights checked	☒ YES	☐ NO		☑
(b) Are there peak height errors?	☐ YES	☐ NO		☑
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	☐ YES	☐ NO	☐ N/A	☑
(d) Error on a Cal Pt, IB/CB, or PB: Has the data been reimported?	☐ YES	☐ NO	☐ N/A	☑
(e) Check standards & reagents in sequence & bench sheet for correct usage (i.e. expiries).	☑ YES	☐ NO	☐ N/A	☑
(f) Check and compare masses (review prep benchsheet)	☑ YES	☐ NO	☐ N/A	☑
(g) Check and compare initial and final volumes	☑ YES	☐ NO	☐ N/A	☑
(h) Do aliquots and dilutions written on benchsheet match those in Excel?	☑ YES	☐ NO	☐ N/A	☑
(i) Is the sequence #, analyst, date, and instrument # on the QC page?	☑ YES	☐ NO		☑
(j) Is the analysis status correct? (analyzed/initial review/reviewed)	☑ YES	☐ NO		☑
(k) Original prep bench sheet added to data package?	☑ YES	☐ NO		☑
(l) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	☑ YES	☐ NO		☑
3. High QA? WO#(s)/Client(s): ***Lancaster Labs***	☑ YES	☐ NO		☑
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	☑ YES	☐ NO		☑
(a) Have the QC requirements been met for all WO#s?	☑ YES	☐ NO		☑
5. 20 or fewer samples in batch?	☑ YES	☐ NO		☑
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 1 MS/MSD/MD per batch?	☑ YES	☐ NO		☑
(b) 1 CCV and 1 CCB every 10 analytical runs?	☑ YES	☐ NO		☑
QA/QC Data Checked				
6. R-value ≥ 0.995 (MDN data only)	☐ PASS	☐ FAIL	☑ N/A	☑
Comments:				
7. The calibration curve included a minimum of 5 Standards	☑ YES	☐ NO		☑
Comments:				
8. 1st Calibration Standard % Recoveries (70-130%)	☑ PASS	☐ FAIL		☑
Comments:				
9. RSD CF (≤ 15%)	☑ PASS	☐ FAIL		☑
Comments:				
10. ICV % Recoveries 80-120%	☑ PASS	☐ FAIL		☑
Comments:				
11.CCV % Recoveries 75-125%	☑ PASS	☐ FAIL		☑
Comments:				

FRONTIER GLOBAL SCIENCES

Peer Review Check List for MHg for CV-GC-AFS (FGS-070.3)

Analyst:	Liz Siska	**Sequence #:**	1F010~~12~~ 10 PL 6/7/11
Reviewer:	~~0~~ Phayuk Lang	**Dataset ID #:**	MMHg07-110601-1
Date:	6/1/2011 6/7/11	**WO #:**	1105274, 1105304, 1105316, 1105343, 1105344
Batch #(s):	F105376	**Client(s):**	[redacted]

	Analyst Initilals:			Reviewer Initials PL
12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)	☑ PASS	☐ FAIL		☑
Comments:				
13. LCS/LCSD or BS/BSD RPD (< 25%)	☑ PASS	☐ FAIL		☑
Comments:				
14. Are the individual Preparation Blanks < PQL (waters < 0.045ng/L), see method PQL	☑ PASS	☐ FAIL		☑
(a) If not < PQL, note which PB(s) are above control limit:				☑
(b) Is the mean PB < PQL (waters < 0.045ng/L)?	☑ YES	☐ NO		☑
15. Mean of ICB and CCBs < 0.025 ng/L	☑ PASS	☐ FAIL		☑
Comments:				
16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	☐ YES	☐ NO	☑ N/A	☑
17. Is the correct 'Source' designated for MD/MS/MSD?	☑ YES	☐ NO		☑
18. For digested preps: was there a spike witness signature & date on the prep bench sheet?	☑ YES	☐ NO	☐ N/A	☑
19. MD RPD/MT RSD(< 25%)	☑ PASS	☐ FAIL		☑
Comments:				
20. MS/MSD RPD(< 25%)	☑ PASS	☐ FAIL		☑
Comments:				
21. MS (AS) % Recoveries (65-130%)	☑ PASS	☐ FAIL		☑
Comments:				
22. MSD (ASD) % Recoveries (65-130%)	☑ PASS	☐ FAIL		☑
Comments:				
23. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)	☑ YES	☑ NO		☑
24. Are all samples within instrument calibration range (or at maximum aliquot size)?	☑ YES	☐ NO		☑
Comments:				
25. For instrumental dilutions, is the dilution factor in excel correct?	☐ PASS	☐ NO	☑ N/A	☑
Is the sample volume, diluent, and final volume of the dilution noted on benchsheet?	☐ PASS	☐ NO	☑ N/A	☑
26. Dissolved < Total metals (if applicable)	☐ PASS	☐ NO	☑ N/A	☑
Comments:				
27. Effluent < Influent metals (visually confirm if needed)	☐ PASS	☐ NO	☑ N/A	☑
Comments:				
28. Are re-runs noted with reason?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
29. For failing QC (CCV, CCB, PB, BS/BSD, CAL): Was a bubbler and trap test run before the analytical run continued?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
30. Do re-run results compare to initial analysis (< 25% RPD)?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
31. Are qualifiers consistent with the data review flowcharts?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
32. Have non-reportable samples been imported into LIMS and clicked to non-reportable?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
33. Have re-extracts been created for non-reportable samples?	☐ YES	☐ NO	☑ N/A	☑
34. Narrations in MMO box in LIMS?				
Comments:				
35. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning.	☑ YES	☐ NO		

FRONTIER GLOBAL SCIENCES

Peer Review Check List for MHg for CV-GC-AFS (FGS-070.3)

Analyst:	Liz Siska	**Sequence #:**	1F01012 10 PL 6/7/11
Reviewer:	Phyllis Lang	**Dataset ID #:**	MMHg15-110601-1
Date:	6/1/2011 6/7/11	**WO #:**	1105260, 1105274, 1105276, 1105316, 1105331
Batch #(s):	F105371	**Client(s):**	[redacted]

Analyst Initilals: [signature] **Reviewer Initials** PL ☒

36 Additional Comments:

BS failed tab test performed & also failed. Original vial from extraction was re-purged & ran & passed. OJ 6/1/11

Corrections

- LIMS → mark samples non-reportable for samples not being reported.
- CCVY is in red.
- missing sequence pages. (1F01010)

✓ OJ 6/7/11

ANALYSIS SEQUENCE

1F01010

Instrument: Hg-07

Calibration ID: UNASSIGNED **Analyzed: 6/1/2011**

Lab Number	Analysis	Order	STD ID	ISTD ID	Client	Comments
1F01010-CAL1	QC	1	1100528			
1F01010-CAL2	QC	2	1100529			
1F01010-CAL3	QC	3	1100530			
1F01010-CAL4	QC	4	1100531			
1F01010-CAL5	QC	5	1100532			
1F01010-ICV1	QC	6	1101212			
1F01010-ICB1	QC	7				
F105376-BLK1	QC	8				
F105376-BLK2	QC	9				
F105376-BLK3	QC	10				
F105376-BS2	QC	11				
F105376-BSD1	QC	12				
1105274-01	MHg-CVAFS-S-MeClExt	13			[redacted]	
1105304-04	MHg-CVAFS-S-MeClExt	14				
1105316-01	MHg-CVAFS-S-MeClExt	15			Lancaster Labs, Inc.	
1105274-02	MHg-CVAFS-S-MeClExt	16			[redacted]	
1105274-03	MHg-CVAFS-S-MeClExt	17				
1F01010-CCV1	QC	18	1100530			
1F01010-CCB1	QC	19				
1105274-01RE1	MHg-CVAFS-S-MeClExt	20				
1105316-01RE1	MHg-CVAFS-S-MeClExt	21			Lancaster Labs, Inc.	

Samples Loaded By 6/8/11 Date

Data Processed By 6/8/11 Date

Due Date: 6/3/2011

ANALYSIS SEQUENCE

1F01010

Instrument: Hg-07

Calibration ID: UNASSIGNED

Analyzed: 6/1/2011

Lab Number	Analysis	Order	STD ID	ISTD ID	Client	Comments
F105376-BS3	QC	22				
F105376-BS4	QC	23				
F105376-DUP1	QC	24				
F105376-MS2	QC	25				
F105376-MSD2	QC	26				
1105304-01	MHg-CVAFS-S-MeClExt	27			[redacted]	
1105304-02	MHg-CVAFS-S-MeClExt	28				
1105304-03	MHg-CVAFS-S-MeClExt	29				
1F01010-CCV2	QC	30	1100530			
1F01010-CCB2	QC	31				
F105376-MS1	QC	32				
F105376-MSD1	QC	33				
F105376-MS3	QC	34				
F105376-MSD3	QC	35				
1105304-05	MHg-CVAFS-S-MeClExt	36			[redacted]	
1105304-06	MHg-CVAFS-S-MeClExt	37				
1105316-02	MHg-CVAFS-S-MeClExt	38			Lancaster Labs, Inc.	
1105343-01	MHg-CVAFS-S-MeClExt	39			[redacted]	
F105376-BS1	QC	40				
1105343-02	MHg-CVAFS-S-MeClExt	41				
1F01010-CCV3	QC	42	1100530			

S 6/8/11
Samples Loaded By Date

S 6/9/11
Data Processed By Date

Due Date: 6/3/2011

ANALYSIS SEQUENCE

1F01010

Instrument: Hg-07

Calibration ID: UNASSIGNED **Analyzed: 6/1/2011**

Lab Number	Analysis	Order	STD ID	ISTD ID	Client	Comments
1F01010-CCB3	QC	43			[redacted]	
1105343-03	MHg-CVAFS-S-MeClExt	44				
1105344-01	MHg-CVAFS-S-MeClExt	45				
1105274-02RE1	MHg-CVAFS-S-MeClExt	46				
1105274-03RE1	MHg-CVAFS-S-MeClExt	47				
1105304-05RE1	MHg-CVAFS-S-MeClExt	48				Added 6/1/2011 by LS
1105343-02RE1	MHg-CVAFS-S-MeClExt	49				Added 6/1/2011 by LS
1F01010-CCV4	QC	50	1100530			
1F01010-CCB4	QC	51				

Samples Loaded By — Date 6/8/11

Data Processed By — Date 6/8/11

Due Date: 6/3/2011

PREPARATION BENCH SHEET

F105376

Frontier Global Sciences, Inc.

Matrix: Soil/Sediment **Prepared using: Hg Aquatic/Solids - Methylene Chloride Extraction for Methyl Hg** **Prepared: 5/30/2011**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F105376-BLK1	Blank	0.5	288					
F105376-BLK2	Blank	0.5	288					
F105376-BLK3	Blank	0.5	288					
F105376-BS1	IAEA-405	0.2	288	0800436	200			
F105376-BS2	IAEA-405	0.2	288	0800436	200			Added 6/1/2011 by LS
F105376-BS3	IAEA-405	0.2	288	0800436	200			Added 6/1/2011 by LS
F105376-BS4	IAEA-405	0.2	288	0800436	200			Added 6/1/2011 by LS
F105376-BSD1	IAEA-405 Dup	0.2	288	0800436	200			
F105376-DUP1	Duplicate [1105304-01]	0.514	288					
F105376-MS1	Matrix Spike [1105274-01]	0.526	288	1001914	25			
F105376-MS2	Matrix Spike [1105304-04]	0.532	288	1001914	25			
F105376-MS3	Matrix Spike [1105316-01]	0.519	288	1001914	25			
F105376-MSD1	Matrix Spike Dup [1105274-01]	0.518	288	1001914	25			
F105376-MSD2	Matrix Spike Dup [1105304-04]	0.527	288	1001914	25			
F105376-MSD3	Matrix Spike Dup [1105316-01]	0.515	288	1001914	25			

Standard ID(s):	Description:	Expiration:
0800436	IAEA-405	27-Mar-12 00:00
1001914	MHg New Primary 100 ng/mL spike	20-Dec-11 00:00

Reagent ID(s):	Description:	Expiration:
1100142	Fisher Methylene Chloride	26-Jan-14 00:00
1100678	Acetate Buffer	26-Sep-11 00:00
1101082	Acid Bromide	30-Jun-11 00:00
1101185	CuSO4	19-Nov-11 00:00
1101250	Ethylating Agent (For Methyl Mercury Analysis)	23-Nov-11 00:00

Due Date: 6/3/2011

PREPARATION BENCH SHEET

F105376

Frontier Global Sciences, Inc.

Matrix: Soil/Sediment **Prepared using: Hg Aquatic/Solids - Methylene Chloride Extraction for Methyl Hg** **Prepared: 5/30/2011**

Lab Number	Sample ID	Initial (g)	Final (mL)	Sample Comments	Analysis Comments
1105274-01	[redacted]	0.528	288	MS/MSD	
1105274-01RE1		0.528	288	MS/MSD	Added 6/1/2011 by LS
1105274-02		0.509	288		
1105274-02RE1		0.509	288		Added 6/1/2011 by LS
1105274-03		0.523	288		
1105274-03RE1		0.523	288		Added 6/1/2011 by LS
1105304-01		0.53	288		EDD Required
1105304-02		0.525	288		EDD Required
1105304-03		0.508	288		EDD Required
1105304-04		0.532	288	MS/MSD requested on this sample	EDD Required
1105304-05		0.512	288		EDD Required
1105304-06		0.532	288		EDD Required
1105316-01	6296495 SED-035-SIV-SD Grab	0.517	288	MS/MSD	High QA
1105316-01RE1	6296495 SED-035-SIV-SD Grab	0.517	288	MS/MSD	High QA, Added 6/1/2011 by LS
1105316-02	6296496 DUP01-SIV-SD Grab	0.522	288		High QA
1105343-01	[redacted]	0.526	288		EDD Required
1105343-02		0.52	288		EDD Required
1105343-03		0.533	288		EDD Required
1105344-01		0.536	288		EDD Required

Due Date: 6/3/2011

10min

Name: Dwyer **Date:** 5/30/11 **Time in:** _____ **Target Temp:** 45

WO# and Client Name: 1105274, 1105304, 1105316, 1105343, 1105344 **Time out:** _____ **Actual Temp:** 45.3

Sample Matrix: ☒ Sediments ☐ Waters ☐ Tissues ☐ FSTM Traps ☐ Filters ☐ Other _____

Analysis: ☐ Total Hg ☒ Methyl Hg ☐ Other Methylene chloride extraction

Digestion Method: ☐ Oven ☐ Hot Plate **Vial Type:** ☐ Glass ☒ Teflon **Final volume:** 28 8

Reagent/LIMS ID: Acid Bromide CuSO4 1101082, 1101185, 1100142 **Brought up to Vol. w/LIMS ID:** N/A

Vial #	Sample ID Number	Sample Size ☐ml ☒g	Comments 100ng/mL
1	F105376 Blank1	0.525	Spike ID: 1101814
2	F105376 Blank2	0.499	Spike Amount: 25uL
3	F105376 Blank3	0.529	Pipette Serial Number: CJ17087
4	F105376 IHG40S BS1 0860476	0.200	
5	F105376 IHG40S BSD1	0.200	
6	1105304-01 MD	0.514	
7	1105274-01 MS1	0.526	
8	1105274-01 MSD1	0.518	
9	1105304-04 MS2	0.532	
10	1105304-04 MSD2	0.527	
11	1105316-01 MS3	0.519	
12	1105316-01 MSD3	0.515	
13	1105274-01	0.528	
14	1105274-02	0.509	
15	1105274-03	0.523	
16	1105304-01	0.530	
17	1105304-02	0.525	
18	1105304-03 5/31/11	~~0.508~~	0.508 g
19	1105304-04	0.532	
20	1105304-05	0.512	
21	1105304-06	0.532	
22	1105316-01	0.517	
23	1105316-02	0.522	
24	1105343-01	0.526	
25	1105343-02	0.520	
26	1105343-03	0.533	
27	1105344-01	0.536	
28			
29			
30			5-31-11

PREPARATION BENCH SHEET

F105376

Frontier Global Sciences, Inc.

Matrix: Soil/Sediment **Prepared using: Hg Aquatic/Solids - Methylene Chloride Extraction for Methyl Hg** **Prepared: 5/30/2011**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F105376-BLK1	Blank	0.5	288					57.6
F105376-BLK2	Blank	0.5	288					57.6
F105376-BLK3	Blank	0.5	288					57.6
F105376-BS1	IAEA-405	0.2	288	0800436	200			10 → 10 → 10 ← purged 10
F105376-BSD1	IAEA-405 Dup	0.2	288	0800436	200			10
F105376-DUP1	Duplicate [1105274-01]	0.514	288					~~[illegible]~~ 61.1" 47.6
F105376-MS1	Matrix Spike [1105274-01]	0.526	288	1001914	25			10
F105376-MS2	Matrix Spike [1105304-04]	0.532	288	1001914	25			10
F105376-MS3	Matrix Spike [1105316-01]	0.519	288	1001914	25			10
F105376-MSD1	Matrix Spike Dup [1105274-01]	0.518	288	1001914	25			10
F105376-MSD2	Matrix Spike Dup [1105304-04]	0.527	288	1001914	25			10
F105376-MSD3	Matrix Spike Dup [1105316-01]	0.515	288	1001914	25			10

Standard ID(s):	Description:	Expiration:
0800436	IAEA-405	27-Mar-12 00:00
1001914	MHg New Primary 100 ng/mL spike	20-Dec-11 00:00

Reagent ID(s):	Description:	Expiration:
1100142	Fisher Methylene Chloride	26-Jan-14 00:00
1101082	Acid Bromide	30-Jun-11 00:00
1101185	CuSO4	19-Nov-11 00:00

Due Date: 6/1/2011

PREPARATION BENCH SHEET

F105376

Frontier Global Sciences, Inc.

Matrix: Soil/Sediment **Prepared using: Hg Aquatic/Solids - Methylene Chloride Extraction for Methyl Hg** **Prepared: 5/30/2011**

Lab Number	Sample ID	Initial (g)	Final (mL)	Sample Comments	Analysis Comments
1105274-01	[redacted]	0.528	288	MS/MSD 10 → 47.6	
1105274-02		0.509	288	10	
1105274-03		0.523	288	10	
1105304-01		0.53	288	10	EDD Required
1105304-02		0.525	288	10	EDD Required
1105304-03		0.508	288	10 → 47.6	EDD Required
1105304-04		0.532	288	MS/MSD requested on this sample 5.2.6	EDD Required
1105304-05		0.512	288	10 → 47.6	EDD Required
1105304-06		0.532	288	10	EDD Required
1105316-01	6296495 SED-035-SIV-SD Grab	0.517	288	MS/MSD 10 → 47.6	High QA
1105316-02	6296496 DUP01-SIV-SD Grab	0.522	288	5.2.6	High QA
1105343-01	[redacted]	0.526	288	10	EDD Required
1105343-02		0.52	288	10 → 47.6	EDD Required
1105343-03		0.533	288	20	EDD Required
1105344-01		0.536	288	20	EDD Required

Work Order	Client	Project
1105274 1105304 1105316 1105343 1105344	[redacted] Lancaster Labs, Inc. [redacted]	Methyl Mercury Analysis

Due Date: 6/1/2011

Frontier Global Sciences, Inc
High QA Report: MHg CV AFS
Analyst: Adela Blaga
Sequence: 1F01012 (MHg15-110601-1), Batch F105371
Reviewer: Lucas Knowles
Reviewed Date: 6/9/2011 6/10/11 LMK

Client(s): Lancaster Labs (WO# 1105316)

Client specific QC: See WO.

(1) Calibration was performed on at least five calibration standards.
- There were five standards analyzed for the calibration curve and all five points were included in the curve.
- For the low calibration standard, 0.05 ng, recovery was 98.4%.

(2) The calibration curve used at least five standards and achieved an RSD CF ≤15%.
- Yes: 2.2%

(3) All LCS have %Rec within 70-130%.
- F105371-BS1/BSD1 (MHg New Primary 1.0 ng/mL, LIMS# 1100487) were analyzed with recoveries of 106% and 112%.

(4) LCS/CRM RPD < 25%.
- The RPD between BS1 and BSD1 was 5.47%.

(5) All sample MS and MSD have %Rec within 65-130% unless spike concentration is less than 1x the ambient concentration.
- F105371-MS1 and MSD1 were analyzed on 1105274-07, and the recoveries were 114% and 112% with an RPD of 2.01%.

(6) All ICB & CCB < 0.025 ng/L
- Yes: 0.002 ± 0.000

(7) PB < PQL (0.05 ng/L)
- Prep blank frequency: Three preparation blanks were analyzed, and all results were below the PQL. The mean of the three blanks was 0.008 ng/L.

(8) MD RPD/MT RSD < 25%.
- F105371-DUP1: Sample 1105274-07 was analyzed in duplicate. RPD was 40.7% and was qualified with QR-07.

QR-07: The RPD/RSD value for the matrix duplicate/triplicate was outside of acceptance limits. Batch QC acceptable based on MS/MSD and/or LCS/LCSD RPD values within control limits.

(9) MS/MSD RPD < 25%.
- In control, see 5.

(10) ICV (80-120%) and CCVs (75-125%) % recoveries are within control limits.
- One ICV and three CCVs were run at a 2.000 ng/L concentration. Recovery results were 87.1%, 106%, 101% and 94.9%.

(11) All reported samples are within standard calibration range.
- All samples on WO 1105316 were within calibration range or analyzed at the maximum aliquot size.

-Peer Reviewer checked transcriptions and calculations.

Follow-up items:

Frontier Global Sciences, Inc
High QA Report: MHg CV AFS
Analyst: Adela Blaga
Sequence: 1F01012 (MHg15-110601-1), Batch F105371
Reviewer: Lucas Knowles
Reviewed Date: 6/9/2011

Email correspondence among the QA coordinator, lab manager, AL group leader, and PM group leader detailing qualifications or corrective actions may be appended to this report.

All analytical issues or other problems:

- None.

42598

42598

Frontier GeoSciences, Inc.

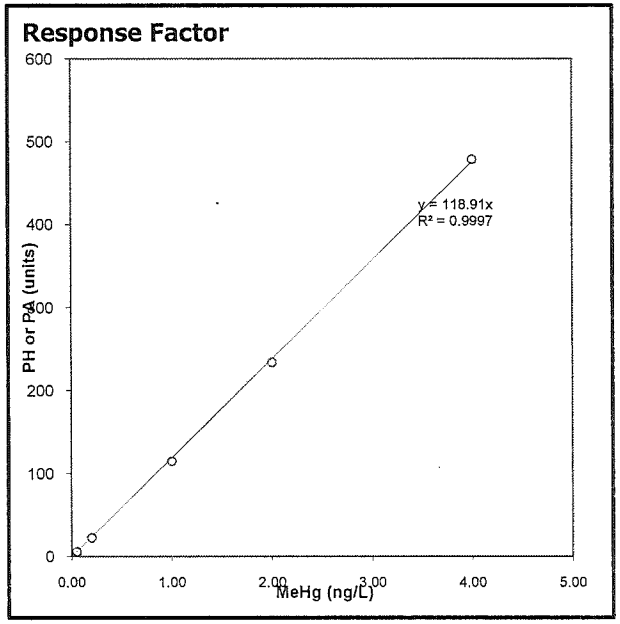
Analysis Datasheet for Methyl Mercury in Waters

Date of Analysis: 6/1/11 | Analyst: LS | Time Begin: 10:01 | Sample Count: 41
Instrument #: Hg-15 | Units ng/L | Time End 17:03
LIMS Sequence #: 1F01012

Calibration Statistics:

LabNumber	n	True Val	Peak Height or Area	Uncorrected Response Factor	Corrected Peak Height	Corrected Response Factor	% Recovery
SEQ-CAL1	1	0.05 ng/L	5.95 units	119.00	5.70 units	114.00	98.4 %Rec
SEQ-CAL2	1	1.00 ng/L	115.00 units	115.00	114.75 units	114.75	99.1 %Rec
SEQ-CAL3	1	2.00 ng/L	234.00 units	117.00	233.75 units	116.88	100.9 %Rec
SEQ-CAL4	1	4.00 ng/L	479.00 units	119.75	478.75 units	119.69	103.3 %Rec
SEQ-CAL5	1	0.20 ng/L	23.00 units	115.00	22.75 units	113.75	98.2 %Rec
SEQ-CAL6	0						
SEQ-CAL7	0						
SEQ-CAL8	0						
SEQ-CAL9	0						

Corr. Mean RF	Corr. St Dev RF	Corr. RSD CF	Uncorr. Mean RF	Eff Factor
115.81	+/- 2.49	2.2% RSD	117.15	**0.8046**



Blanks:

LabNumber	n	Mean	Std Dev	Mean (ng/L)	Std Dev (ng/L)
SEQ-ICB					
SEQ-CCB					
SEQ-IBL	4	0.25 units	±0.06	0.002 ng/L	±0.000

Preparation Blanks

Sample Type	Group ID	n	Mean	Std Dev
BLK	1	3	0.003 ng/L	±0.008
BLK	2	0	0.000 ng/L	
BLK	3	0	0.000 ng/L	
BLK	4	0	0.000 ng/L	
BLK	5	0	0.000 ng/L	

QUALITY ASSURANCE REVIEWED

INITIALS: LyMK 6/10/11

QUALITY ASSURANCE PEER-REVIEWED

INITIALS: pc 6/15/11

FileID	Instrument	Analyst	Analyzed	Tp	Bub	Sample Type	LabNumber	Aliquot Volume	Instrumental Conc.	Group ID	No PB Correction?	Uncorrected PH	Instrumental Dilution	RESP	Dilution	InitialResult	FinalResult	InitialUnits	Comments
1501	Hg-15	LS	6/1/11 10:01	1	1	CAL	SEQ-CAL1	50.000 mL	0.002 ng			6.0		5.7	1.00	0.049	0.049	ng/L	
1502	Hg-15	LS	6/1/11 10:11	2	2	CAL	SEQ-CAL2	50.000 mL	0.050 ng			115.0		114.8	1.00	0.991	0.991	ng/L	
1503	Hg-15	LS	6/1/11 10:21	3	3	CAL	SEQ-CAL3	50.000 mL	0.101 ng			234.0		233.8	1.00	2.018	2.018	ng/L	
1504	Hg-15	LS	6/1/11 10:31	4	4	CAL	SEQ-CAL4	50.000 mL	0.207 ng			479.0		478.8	1.00	4.134	4.134	ng/L	
1505	Hg-15	LS	6/1/11 10:42	6	1	CAL	SEQ-CAL5	50.000 mL	0.010 ng			23.0		22.8	1.00	0.196	0.196	ng/L	
1506	Hg-15	LS	6/1/11 10:52	8	2	CAL	SEQ-ICV1	50.000 mL	0.087 ng			202.0		201.8	1.00	1.742	1.742	ng/L	87.1 %Rec
1507	Hg-15	LS	6/1/11 11:02	1	3	CAL	SEQ-ICB1	50.000 mL	0.000 ng			0.2		-0.1	1.00	0.000	0.000	ng/L	
1508	Hg-15	LS	6/1/11 11:13	2	1	BLK	F105371-BLK1	40.000 mL	0.000 ng	1		0.1		-0.2	1.25	-0.002	-0.002	ng/L	
1509	Hg-15	LS	6/1/11 11:23	3	2	BLK	F105371-BLK2	40.000 mL	0.000 ng	1		0.6		0.4	1.25	0.004	0.005	ng/L	
1510	Hg-15	LS	6/1/11 11:33	4	3	BLK	F105371-BLK3	40.000 mL	0.000 ng	1		0.2		-0.1	1.25	-0.001	-0.001	ng/L	
1511	Hg-15	LS	6/1/11 11:43	6	4	SAM	F105371-BS1	40.000 mL	0.077 ng	1		178.0		177.8	1.25	1.907	2.384	ng/L	105.9 %Rec
1512	Hg-15	LS	6/1/11 11:54	8	1	SAM	F105371-BSD1	40.000 mL	0.081 ng	1		188.0		187.8	1.25	2.014	2.518	ng/L	111.9 %Rec
1513	Hg-15	LS	6/1/11 12:04	1	2	SAM	1105274-07	40.000 mL	0.004 ng	1		9.5		9.3	1.25	0.099	0.123	ng/L	
1514	Hg-15	LS	6/1/11 12:14	2	3	SAM	1105260-07	40.000 mL	0.011 ng	1		25.3		25.0	1.25	0.268	0.335	ng/L	
1515	Hg-15	LS	6/1/11 12:25	3	4	SAM	1105274-04	40.000 mL	0.008 ng	1		18.4		18.2	1.25	0.194	0.243	ng/L	
1516	Hg-15	LS	6/1/11 12:35	4	1	SAM	1105274-05	40.000 mL	0.004 ng	1		9.4		9.2	1.25	0.098	0.122	ng/L	-5.4 %Rec
1517	Hg-15	LS	6/1/11 12:45	6	2	SAM	1105274-06	40.000 mL	0.018 ng	1		42.2		42.0	1.25	0.450	0.562	ng/L	14.2 %Rec
1518	Hg-15	LS	6/1/11 12:55	8	3	CAL	SEQ-CCV1	50.000 mL	0.106 ng			245.0		244.8	1.00	2.113	2.113	ng/L	105.7 %Rec
1519	Hg-15	LS	6/1/11 13:06	1	4	CAL	SEQ-CCB1	50.000 mL	0.000 ng			0.3		0.1	1.00	0.000	0.000	ng/L	
1520	Hg-15	LS	6/1/11 13:16	2	1	SAM	F105371-DUP1	40.000 mL	0.006 ng	1		14.2		14.0	1.25	0.149	0.186	ng/L	
1521	Hg-15	LS	6/1/11 13:26	3	2	SAM	F105371-MS1	40.000 mL	0.087 ng	1		201.0		200.8	1.25	2.154	2.692	ng/L	113.6 %Rec
1522	Hg-15	LS	6/1/11 13:37	4	3	SAM	F105371-MSD1	40.000 mL	0.085 ng	1		197.0		196.8	1.25	2.111	2.639	ng/L	
1523	Hg-15	LS	6/1/11 13:47	6	4	SAM	1105274-08	40.000 mL	0.014 ng	1		33.0		32.8	1.25	0.351	0.439	ng/L	
1524	Hg-15	LS	6/1/11 13:57	8	1	SAM	1105274-09	40.000 mL	0.000 ng	1		0.5		0.3	1.25	0.002	0.003	ng/L	
1525	Hg-15	LS	6/1/11 14:08	1	2	SAM	1105276-01	40.000 mL	0.002 ng	1		4.8		4.6	1.25	0.048	0.060	ng/L	
1526	Hg-15	LS	6/1/11 14:18	2	3	SAM	1105276-03	40.000 mL	0.005 ng	1		12.4		12.2	1.25	0.130	0.162	ng/L	
1527	Hg-15	LS	6/1/11 14:28	3	4	SAM	1105276-05	40.000 mL	0.006 ng	1		14.2		13.9	1.25	0.149	0.186	ng/L	
1528	Hg-15	LS	6/1/11 14:38	4	1	SAM	1105276-07	40.000 mL	0.014 ng	1		33.0		32.8	1.25	0.351	0.439	ng/L	
1529	Hg-15	LS	6/1/11 14:49	6	2	SAM	1105276-09	40.000 mL	0.005 ng	1		11.5		11.3	1.25	0.120	0.150	ng/L	
1530	Hg-15	LS	6/1/11 14:59	8	3	CAL	SEQ-CCV2	50.000 mL	0.101 ng			235.0		234.8	1.00	2.027	2.027	ng/L	101.3 %Rec
1531	Hg-15	LS	6/1/11 15:09	1	4	CAL	SEQ-CCB2	50.000 mL	0.000 ng			0.2		-0.1	1.00	0.000	0.000	ng/L	
1532	Hg-15	LS	6/1/11 15:20	2	1	SAM	1105276-11	40.000 mL	0.005 ng	1		12.7		12.5	1.25	0.133	0.166	ng/L	
1533	Hg-15	LS	6/1/11 15:30	3	2	SAM	1105276-13	40.000 mL	0.011 ng	1		25.1		24.9	1.25	0.266	0.333	ng/L	
1534	Hg-15	LS	6/1/11 15:40	4	3	SAM	1105276-15	40.000 mL	0.000 ng	1		0.3		0.1	1.25	0.000	0.000	ng/L	
1535	Hg-15	LS	6/1/11 15:50	6	4	SAM	1105276-17	40.000 mL	0.009 ng	1		20.5		20.3	1.25	0.217	0.271	ng/L	
1536	Hg-15	LS	6/1/11 16:01	1	1	SAM	1105276-19	40.000 mL	0.011 ng	1		26.5		26.3	1.25	0.281	0.351	ng/L	
1537	Hg-15	LS	6/1/11 16:11	8	2	SAM	1105316-03	40.000 mL	0.000 ng	1		0.4		0.2	1.25	0.001	0.001	ng/L	
1538	Hg-15	LS	6/1/11 16:21	2	3	SAM	1105331-01	40.000 mL	0.002 ng	1		4.4		4.2	1.25	0.044	0.055	ng/L	
1539	Hg-15	LS	6/1/11 16:32	3	4	SAM	1105331-02	40.000 mL	0.002 ng	1		6.0		5.8	1.25	0.061	0.076	ng/L	
1540	Hg-15	LS	6/1/11 16:42	4	1	CAL	SEQ-CCV3	50.000 mL	0.095 ng			220.0		219.8	1.00	1.897	1.897	ng/L	94.9 %Rec
1541	Hg-15	LS	6/1/11 16:52	6	2	CAL	SEQ-CCB3	50.000 mL	0.000 ng			0.3		0.1	1.00	0.000	0.000	ng/L	

ANALYSIS SEQUENCE

1F01012

Instrument: Hg-15

Calibration ID: UNASSIGNED **Analyzed: 6/1/2011**

Lab Number	Analysis	Order	STD ID	ISTD ID	Client	Comments
1F01012-CAL1	QC	1	1100528			
1F01012-CAL2	QC	2	1100529			
1F01012-CAL3	QC	3	1100530			
1F01012-CAL4	QC	4	1100531			
1F01012-CAL5	QC	5	1100532			
1F01012-ICV1	QC	6	1101212			
1F01012-ICB1	QC	7				
F105371-BLK1	QC	8				
F105371-BLK2	QC	9				
F105371-BLK3	QC	10				
F105371-BS1	QC	11				
F105371-BSD1	QC	12				
1105274-07	MHg-CVAFS-W-Dist	13			[redacted]	
1105260-07	MHg-CVAFS-W-Dist	14				
1105274-04	MHg-CVAFS-W-Dist	15				
1105274-05	MHg-CVAFS-W-Dist	16				
1105274-06	MHg-CVAFS-W-Dist	17				
1F01012-CCV1	QC	18	1100530			
1F01012-CCB1	QC	19				
F105371-DUP1	QC	20				
F105371-MS1	QC	21				

Samples Loaded By — Date 6/1/11

Data Processed By — Date 6/1/11

Due Date: 6/6/2011

ANALYSIS SEQUENCE

1F01012

Instrument: Hg-15

Calibration ID: UNASSIGNED

Analyzed: 6/1/2011

Lab Number	Analysis	Order	STD ID	ISTD ID	Client	Comments
F105371-MSD1	QC	22				
1105274-08	MHg-CVAFS-W-Dist	23			[redacted]	
1105274-09	MHg-CVAFS-W-Dist	24				
1105276-01	MHg-CVAFS-W-Dist	25				
1105276-03	MHg-CVAFS-W-Dist	26				
1105276-05	MHg-CVAFS-W-Dist	27				
1105276-07	MHg-CVAFS-W-Dist	28				
1105276-09	MHg-CVAFS-W-Dist	29				
1F01012-CCV2	QC	30	1100530			
1F01012-CCB2	QC	31				
1105276-11	MHg-CVAFS-W-Dist	32				
1105276-13	MHg-CVAFS-W-Dist	33				
1105276-15	MHg-CVAFS-W-Dist	34				
1105276-17	MHg-CVAFS-W-Dist	35				
1105276-19	MHg-CVAFS-W-Dist	36				
1105316-03	MHg-CVAFS-W-Dist	37			Lancaster Labs, Inc.	
1105331-01	MHg-CVAFS-W-Dist	38			[redacted]	
1105331-02	MHg-CVAFS-W-Dist	39				
1F01012-CCV3	QC	40	1100530			
1F01012-CCB3	QC	41				

Samples Loaded By _____ Date 6/1/11

Data Processed By _____ Date 6/1/11

Due Date: 6/6/2011

ANALYSIS SEQUENCE

1F01012

Instrument: Hg-15

Calibration ID: UNASSIGNED

Analyzed: 6/1/2011

Lab Number	Analysis	Order	STD ID	ISTD ID	Client	Comments

Samples Loaded By — Date: 6/1/11

Data Processed By — Date: 6/1/11

Due Date: 6/6/2011

PREPARATION BENCH SHEET

F105371

Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - Methyl Hg Distillation for Water** **Prepared: 5/30/2011**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F105371-BLK1	Blank	45	40					
F105371-BLK2	Blank	45	40					
F105371-BLK3	Blank	45	40					
F105371-BS1	Blank Spike	45	40	1100487	90			
F105371-BSD1	Blank Spike Dup	45	40	1100487	90			
F105371-DUP1	Duplicate [1105274-07]	45	40					
F105371-MS1	Matrix Spike [1105274-07]	45	40	1100487	90			
F105371-MSD1	Matrix Spike Dup [1105274-07]	45	40	1100487	90			

Standard ID(s):	Description:	Expiration:
1100487	MHg New Primary 1.0 ng/mL CAL	17-Jun-11 00:00

Reagent ID(s):	Description:	Expiration:
1100549	Omnitrace Hydrochloric Acid	23-Mar-14 00:00
1100678	Acetate Buffer	26-Sep-11 00:00
1101116	APDC	13-Nov-11 00:00
1101250	Ethylating Agent (For Methyl Mercury Analysis)	23-Nov-11 00:00

Due Date: 6/6/2011

PREPARATION BENCH SHEET

F105371

Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - Methyl Hg Distillation for Water** **Prepared: 5/30/2011**

Lab Number	Sample ID	Initial (mL)	Final (mL)	Sample Comments	Analysis Comments
1105260-07	[redacted]	45	40		
1105274-04		45	40		
1105274-05		45	40		
1105274-06		45	40		
1105274-07		45	40	MS/MSD	
1105274-08		45	40		
1105274-09		45	40		
1105276-01		45	40		
1105276-03		45	40		
1105276-05		45	40		
1105276-07		45	40		
1105276-09		45	40		
1105276-11		45	40		
1105276-13		45	40		
1105276-15		45	40		
1105276-17		45	40		
1105276-19		45	40		
1105316-03	FB08-SIV-052311	45	40		High QA
1105331-01	[redacted]	45	40		
1105331-02		45	40		

Due Date: 6/6/2011

PREPARATION BENCH SHEET

F105371

Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - Methyl Hg Distillation for Water** **Prepared: 5/30/2011**

Work Order	Client	Project
1105260	[redacted]	
1105274		
1105276		
1105316	Lancaster Labs, Inc.	Methyl Mercury Analysis
1105331	[redacted]	

Due Date: 6/6/2011

PREPARATION BENCH SHEET

F105371

Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - Methyl Hg Distillation for Water** **Prepared: 5/30/2011**

	Lab Number	Sample ID	Initial (mL)	Final (mL)	Sample Comments	Analysis Comments
1	1105260-07	[redacted]	45	40		
2	1105274-04		45	40		
3	1105274-05		45	40		
4	1105274-06		45	40		
5	1105274-07		45	40	MS/MSD	
6	1105274-08		45	40		
7	1105274-09		45	40		
8	1105276-01		45	40		
9	1105276-03		45	40		
10	1105276-05		45	40		
11	1105276-07		45	40		
12	1105276-09		45	40		
13	1105276-11		45	40		
14	1105276-13		45	40		
15	1105276-15		45	40		
16	1105276-17		45	40		
17	1105276-19		45	40		
18	1105316-03	6296497 FB-07-SIV-SS-052311	45	40		High QA
19	1105331-01	[redacted]	45	40		
20	1105331-02		45	40		

Due Date: 6/6/2011

PREPARATION BENCH SHEET

F105371

Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - Methyl Hg Distillation for Water** **Prepared: 5/30/2011**

Work Order	Client	Project
1105260	[redacted]	
1105274		
1105276		
1105316		
1105331		

Due Date: 6/6/2011

Sample Digestion Log

Name: Dalton Date: 5/30/2011 Analysis: Methyl Hg
WO#: 1105260, 1105274, 1105276 Batch #: F105371 Sample Matrix: Water

Digest #	Sample ID Number	Sample Size (ml)	pH (≥3)
BLK1	F105371 Blank1	45	3.5
BLK2	F105371 Blank2	45	3.3
BLK3	F105371 Blank3	45	3.3
BS	F105371 BS	45	3.5
BSD	F105371 BSD	45	3.5
1	1105260-07	45	3.5
2	1105274-01	45	3.7
3	1105274-05	45	3.5
4	1105274-06	45	3.5
5	1105274-07	45	3.5
5DUP	1105274-07 DUP	45	3.5
5MS	1105274-07 MS	45	3.5
5MSD	1105274-07 MSD	45	3.5
6	1105274-08	45	3.7
7	1105274-09	45	3.8
8	1105276-01	45	3.5
9	1105276-03	45	3.5
10	1105276-05	45	3.9
11	1105276-07	45	4.0
12	1105276-09	45	4.0
13	1105276-11	45	3.9
14	1105276-13	45	3.5
15	1105276-15	45	4.0
16	1105276-17	45	4.0
17	1105276-19	45	3.5
18	1105316-03	45	3.8
19	1105331-01	45	3.5
20	1105331-02	45	3.5

1.0ug/mL
Spike ID: 1106487
Spike Amount: 90ul
Balance #: 2
Pipette #: CH86706
APDC ID: 1101116
HCl ID: 1100549

Temperature: (No set range as the temp. may be changed to keep flow rate of ≥10 ml per hour. Temperature is recorded for informational purposes only.)
Unit 1: 120.8
Unit 2: 120.6
Unit 3: 120.3
Unit 4: 120.8
Unit 5: 120.5
Unit 6: 121.4

Comments:

5-30-11 mg

PREPARATION BENCH SHEET

F105371

Frontier Global Sciences, Inc.

Matrix: Water **Prepared using: Hg Aquatic/Solids - Methyl Hg Distillation for Water** **Prepared: 5/30/2011**

Lab Number	Sample ID and Source Sample	Initial (mL)	Final (mL)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F105371-BLK1	Blank	45	40					
F105371-BLK2	Blank	45	40					
F105371-BLK3	Blank	45	40					
F105371-BS1	Blank Spike	45	40	1100837	90			
F105371-BSD1	Blank Spike Dup	45	40	1100837	90			
F105371-DUP1	Duplicate	45	40					
F105371-MS1	Matrix Spike	45	40	1100837	90			
F105371-MSD1	Matrix Spike Dup	45	40	1100837	90			

Standard ID(s):	Description:	Expiration:
1100837	THg Secondary Spike 1000 ng/mL	14-Oct-11 00:00

Due Date: 6/6/2011

FRONTIER GLOBAL SCIENCES

Peer Review Check List for MHg for CV-GC-AFS (FGS-070.3)

Analyst:	Liz Siska	**Sequence #:**	1F01012
Reviewer:	Shaynda Carey	**Dataset ID #:**	MMHg15-110601-1
Date:	6/1/2011 6/2/11	**WO #:**	1105260, 1105274, 1105276, 1105316, 1105331
Batch #(s):	F105371	**Client(s):**	[redacted]

• **Select the correct preparation method.**

Analyte	Prep Method		Matrix	PQL
☑ MHg	FGS-013	MHg Distillation	Water	0.05 ng/L 0.05 ng/L
☐ MHg	FGS-010	KOH/MeOH Digest	Tissue	4 ng/g
☐ MHg	FGS-045	MeCl Extraction	Sed/Soil	0.050 ng/g
☐ DMHg	FGS-098.1(Not Approved for use in AL lab)		ALL	

	Analyst Initilals:			Reviewer Initials
1. Compare Sample ID with Bench sheet/Sequence/Raw Data (Have all samples been imported?)	☑ YES	☐ NO		☑
2. Check for transcription errors from Excel spreadsheet (or Prep Bench sheet)/Raw data	☑ YES	☐ NO		☑
(a) Reviewer: 100% of peak heights checked	☑ YES	☐ NO		☑
(b) Are there peak height errors?	☐ YES	☐ NO		☑
(c) Error on a sample: Do peak heights, responses, & initial results match corrected data?	☐ YES	☐ NO	☐ N/A	☑
(d) Error on a Cal Pt, IB/CB, or PB: Has the data been reimported?	☑ YES	☐ NO	☐ N/A	☑
(e) Check standards & reagents in sequence & bench sheet for correct usage (i.e. expiries).	☑ YES	☐ NO	☐ N/A	☑
(f) Check and compare masses (review prep benchsheet)	☐ YES	☐ NO	☑ N/A	☑
(g) Check and compare initial and final volumes	☑ YES	☐ NO	☐ N/A	☑
(h) Do aliquots and dilutions written on benchsheet match those in Excel?	☑ YES	☐ NO	☐ N/A	☑
(i) Is the sequence #, analyst, date, and instrument # on the QC page?	☑ YES	☐ NO		☑
(j) Is the analysis status correct? (analyzed/initial review/reviewed)	☑ YES	☐ NO		☑
(k) Original prep bench sheet added to data package?	☑ YES	☐ NO		☑
(l) Benchsheet prep date MUST match actual prep date (check if re-shot vs re-extract)	☑ YES	☐ NO		☑
3. High QA? WO#(s)/Client(s): ***Lancaster Labs***	☑ YES	☐ NO		☑
4. Client specific QC? (if Yes, refer to Project Notes/LIMS)	☑ YES	☐ NO		☑
(a) Have the QC requirements been met for all WO#s?	☑ YES	☐ NO		☑
5. 20 or fewer samples in batch?	☑ YES	☐ NO		☑
(a) 3 PBs, 1 LCS/LCSD (or BS/BSD), 1 MS/MSD/MD per batch?	☑ YES	☐ NO		☑
(b) 1 CCV and 1 CCB every 10 analytical runs?	☑ YES	☐ NO		☑
QA/QC Data Checked				
6. R-value ≥ 0.995 (MDN data only)	☐ PASS	☐ FAIL	☑ N/A	☑
Comments:				
7. The calibration curve included a minimum of 5 Standards	☑ YES	☐ NO		☑
Comments:				
8. 1st Calibration Standard % Recoveries (70-130%)	☑ PASS	☐ FAIL		☑
Comments:				
9. RSD CF (≤ 15%)	☑ PASS	☐ FAIL		☑
Comments:				
10. ICV % Recoveries 80-120%	☑ PASS	☐ FAIL		☑
Comments:				
11.CCV % Recoveries 75-125%	☑ PASS	☐ FAIL		☑
Comments:				

FRONTIER GLOBAL SCIENCES

Peer Review Check List for MHg for CV-GC-AFS (FGS-070.3)

Analyst:	Liz Siska	**Sequence #:**	1F01012
Reviewer:	Ø Phayvah Lamy	**Dataset ID #:**	MMHg15-110601-1
Date:	6/1/2011 6/7/11	**WO #:**	[redacted]
Batch #(s):	F105371	**Client(s):**	[redacted]

Analyst Initilals: Lu **Initials** PL

12. LCS/LCSD/CRM/BS/BSD % Recoveries (70-130%)	☑ PASS	☐ FAIL		☑
Comments:				
13. LCS/LCSD or BS/BSD RPD (< 25%)	☑ PASS	☐ FAIL		☑
Comments:				
14. Are the individual Preparation Blanks < PQL (waters < 0.045ng/L), see method PQL	☑ PASS	☐ FAIL		☑
(a) If not < PQL, note which PB(s) are above control limit:				☑
(b) Is the mean PB < PQL (waters < 0.045ng/L)?	☑ YES	☐ NO		☑
15. Mean of ICB and CCBs < 0.025 ng/L	☑ PASS	☐ FAIL		☑
Comments:				
16. Have Total Solids been applied? (If NO, please ensure that they are done or nearly done)	☐ YES	☐ NO	☑ N/A	☑
17. Is the correct 'Source' designated for MD/MS/MSD?	☑ YES	☐ NO		☑
18. For digested preps: was there a spike witness signature & date on the prep bench sheet?	☑ YES	☐ NO	☐ N/A	☑
19. MD RPD/MT RSD(< 25%)	☐ PASS	☑ FAIL		☑
Comments: ***qualifiable***				
20. MS/MSD RPD(< 25%)	☑ PASS	☐ FAIL		☑
Comments:				
21. MS (AS) % Recoveries (65-130%)	☑ PASS	☐ FAIL		☑
Comments:				
22. MSD (ASD) % Recoveries (65-130%)	☑ PASS	☐ FAIL		☑
Comments:				
23. Spiked 1-5X ambient or 1-5X PQL (whichever is higher) (from EPA 1630)	☐ YES	☑ NO		☑
24. Are all samples within instrument calibration range (or at maximum aliquot size)?	☑ YES	☐ NO		☑
Comments:				
25. For instrumental dilutions, is the dilution factor in excel correct?	☐ PASS	☐ NO	☑ N/A	☑
Is the sample volume, diluent, and final volume of the dilution noted on benchsheet?	☐ PASS	☐ NO	☑ N/A	☑
26. Dissolved < Total metals (if applicable)	☑ PASS	☐ NO	☐ N/A	☑
Comments:				
27. Effluent < Influent metals (visually confirm if needed)	☑ PASS	☐ NO	☐ N/A	☑
Comments:				
28. Are re-runs noted with reason?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
29. For failing QC (CCV, CCB, PB, BS/BSD, CAL): Was a bubbler and trap test run before the analytical run continued?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
30. Do re-run results compare to initial analysis (< 25% RPD)?	☐ YES	☐ NO	☐ N/A	☑
Comments:				
31. Are qualifiers consistent with the data review flowcharts?	☑ YES	☐ NO	☐ N/A	☑
Comments:				
32. Have non-reportable samples been imported into LIMS and clicked to non-reportable?	☐ YES	☐ NO	☑ N/A	☑
Comments:				
33. Have re-extracts been created for non-reportable samples?	☐ YES	☐ NO	☑ N/A	☑
34. Narrations in MMO box in LIMS?				
Comments:				
35. Are there any HIGH QA projects within the data? If so, place data package in QA office before scanning.	☑ YES	☐ NO		

FRONTIER GLOBAL SCIENCES

Peer Review Check List for MHg for CV-GC-AFS (FGS-070.3)

Analyst:	Liz Siska	**Sequence #:**	1F01012
Reviewer:	Phaymak Liang	**Dataset ID #:**	MMHg15-110601-1
Date:	6/1/2011 6/2/11	**WO #:**	1105260, 1105274, 1105276, 1105316, 1105331
Batch #(s):	F105371	**Client(s):**	[redacted]

Analyst Initilals: [illegible] **Reviewer Initials** PL ☒

36 Additional Comments:

Comments

- BK2 PH=0.6
- DUP1 PH=14.2

JT 6/8/11

Frontier Global Sciences, Inc
High QA Report: Total Solids
Analyst: Duyen Hinh, Ben Boritz
Sequence: TS110530-1, Batch F105379
Reviewer: Lucas Knowles
Reviewed Date: 6/24/2011 LMK 6/24/11

Client(s): Lancaster Labs (WO# 1105316)

Client specific QC: See WO.

(1) MD RPD/MT RSD < 25%.
- Sample 1105304-04 was analyzed in duplicate. RPD was 5.3%.
- Sample 1105274-01 was analyzed in duplicate. RPD was 1.1%.

(2) All quality control criteria were met.
- All samples were in control.

-Peer Reviewer checked transcriptions and calculations.

Follow-up items:
Email correspondence among the QA coordinator, lab manager, AL group leader, and PM group leader detailing qualifications or corrective actions may be appended to this report.

All analytical issues or other problems:
- None.

FRONTIER GEOSCIENCES
ENVIRONMENTAL RESEARCH CORPORATION
414 Pontius North • Seattle, WA 98109
(206) 622-6960 • fax: (206) 622-6870

Total Solids Dataset Cover Page

Dataset ID: TS110530-1
LIMS Batch ID: F105379
Work Order(s): 1105343, 1105344, 1104274, 1105316
5 BBs · 3/11

Analyst: dueynh, BB Data Analysis: dueynh, BB

Client/Project Name*
[redacted] Lancaster
*Clients with name in **bold High QA**

Analytical Issues/explanations:

QUALITY ASSURANCE
PEER-REVIEWED

INITIALS: PL 6/2/11

QUALITY ASSURANCE REVIEWED

INITIALS: LMK 6/24/11

Printed: 5/31/2011

Preparation Date: May 30, 2011 **Batch #:** 1 **Analyst:** dueynh, BB

LIMsBatch ID: F105379

Work Order(s): 1105304, 1105343, 1105344, 1105274, 1105316

Project(s): TVA, **Burleson**, Lancaster

5-31-11

Pan ID	Sample ID	Pan Wt (g)	Pan + Sample Wet (g)	Wet Sample (g)	Pan + Sample Dry (g)	Dry Sample (g)	% TS	Notes
1	1105304-01	1.328	5.849	4.521	3.729	2.401	53.1%	
2	1105304-02	1.338	4.294	2.956	2.767	1.429	48.3%	
3	1105304-03	1.315	3.909	2.594	2.410	1.095	42.2%	
4	1105304-04	1.330	4.404	3.074	2.786	1.456	47.4%	
4 MD	1105304-04MD	1.315	5.309	3.994	3.310	1.995	49.9%	5.3% RPD
5	1105304-05	1.348	5.280	3.932	3.778	2.430	61.8%	
6	1105304-06	1.327	4.369	3.042	2.774	1.447	47.6%	
7	1105343-01	1.346	5.223	3.877	3.809	2.463	63.5%	
8	1105343-02	1.336	4.742	3.406	3.391	2.055	60.3%	
9	1105343-03	1.341	5.220	3.879	3.466	2.125	54.8%	
10	1105344-01	1.336	4.334	2.998	2.563	1.227	40.9%	
11	1105274-01	1.357	6.934	5.577	3.284	1.927	34.6%	
12	1105274-01MD	1.330	6.863	5.533	3.221	1.891	34.2%	1.1% RPD
13	1105274-02	1.336	6.887	5.551	5.588	4.252	76.6%	
14	1105274-03	1.325	6.848	5.523	5.503	4.178	75.6%	
15	1105316-01	1.346	6.976	5.630	3.836	2.490	44.2%	
16	1105316-02	1.334	6.689	5.355	4.453	3.119	58.2%	

Total Solids Logbook

Lab Assistant(s): BB, Duyen Temperature Range 103-105°C Actual Temperature: 105°C Thermometer#: 16823

Date: 5-30-11 Batch: F105379 Oven # 4 Balance# 10

Client(s)/Work Order: TVA 1105304, TVA 1105343, TVA 1105344, Burleson 1105274, Lancaster 1105316

Client	Sample ID	Pan#	Pan (g)	Pan + Wet Sample (g)	Pan + Dry Sample (g)	Notes
TVA	1105304-01	1	1.328	5.849	3.729	
	1105304-02	2	1.338	4.294	2.767	
	1105304-03	3	1.315	3.909	2.410	
	1105304-04	4	1.330	4.404	2.786	
	1105304-04MD	4MD	1.315	5.309	3.310	
	1105304-05	5	1.348	5.280	3.778	
	1105304-06	6	1.327	4.369	2.774	
	1105343-01	7	1.346	5.223	3.809	
	1105343-02	8	1.336	4.742	3.391	
	1105343-03	9	1.341	5.220	3.466	
TVA	1105344-01	10	1.336	4.334	2.563	
Burleson	1105274-01	11	1.357	6.934	3.284	
	1105274-01MD	12	1.330	6.863	3.221	
	1105274-02	13	1.336	6.887	5.588	
	1105274-03	14	1.325	6.848	5.503	
Lancaster	1105316-01	15	1.346	6.976	3.836	
	1105316-02	16	1.334	6.689	4.453	
						5-31-11

PREPARATION BENCH SHEET

F105379

Frontier Global Sciences, Inc.

Matrix: Soil/Sediment **Prepared using: UNASSIGNED - Solids Analysis** **Prepared: 5/30/2011**

Lab Number	Sample ID and Source Sample	Initial (g)	Final (g)	Spike1 ID	µl Spike1	Spike2 ID	µl Spike2	Extraction Comments
F105379-DUP1	Duplicate [1105304-04]	3.994	1.995					
F105379-DUP2	Duplicate [1105274-01]	5.533	1.891					

Standard ID(s): Description: Expiration:

Due Date: 6/1/2011

PREPARATION BENCH SHEET

F105379

Frontier Global Sciences, Inc.

Matrix: Soil/Sediment **Prepared using: UNASSIGNED - Solids Analysis** **Prepared: 5/30/2011**

Lab Number	Sample ID	Initial (g)	Final (g)	Sample Comments	Analysis Comments
1105274-01	SD SED	5.577	1.927	MS/MSD	
1105274-02	RCDS SED	5.551	4.252		
1105274-03	RCUS SED	5.523	4.178		
1105304-01	KIF-ERM0.5-SED-052311-F	4.521	2.401		EDD Required
1105304-02	KIF-ERM0.8-SED-052311-F	2.956	1.429		EDD Required
1105304-03	KIF-ERM1.0-AED-052311-F	2.594	1.095		EDD Required
1105304-04	KIF-ERM1.0-SED-052311-F	3.074	1.456	MS/MSD requested on this sample	EDD Required
1105304-05	KIF-ERM2.5-SED-052311-F	3.932	2.43		EDD Required
1105304-06	KIF-ERM4.0-SED-052311-F	3.042	1.447		EDD Required
1105316-01	6296495 SED-035-SIV-SD Grab	5.63	2.49	MS/MSD	High QA
1105316-02	6296496 DUP01-SIV-SD Grab	5.355	3.119		High QA
1105343-01	KIF-ERM3.0-SED-052411-F	3.877	2.463		EDD Required
1105343-02	KIF-ERM3.5-SED-052411-F	3.406	2.055		EDD Required
1105343-03	KIF-ERM5.5-SED-052411-F	3.879	2.125		EDD Required
1105344-01	KIF-ERM_REF-SED-052511-F	2.998	1.227		EDD Required

Work Order
1105274
1105304
1105316
1105343
1105344

Client [redacted]

Project [redacted]

Due Date: 6/1/2011

FRONTIER GLOBAL SCIENCES

Peer Review Checklist for TS(FGS-019.3) and TSS(FGS-016.4)

Analyst/Date: BB 5/31/2011 **Reviewer/Date:** Thayvanh Lamy 6/2/11

WO #: 1105304, 1105343, 1105344, 1105274, 1105316

Batch #: F105379

Dataset ID: TS110530-1 **Client(s):** TVA

- **Select the correct analysis method.**

	SOP	Method	Matrix	MDL	PQL
☑	FGS-019.3	TS	Sed/Soil	-	-
☐	FGS-016.4	TSS	Water	0.5 mg/L	-

General Comments/Re-run requirements:

				Reviewer Initials
1. Check for transcription errors from Benchsheet/Raw Data	☑ YES	☐ NO		PL
(a) Check and compare SampleID(s)	☑ YES	☐ NO		
(b) Check and compare masses and/or volumes	☑ YES	☐ NO		
(c) Are the analyst name, datasetID #, preparation date, and client names listed	☑ YES	☐ NO		
(d) Benchsheet prep date MUST match actual prep date	☑ YES	☐ NO		
2. 1 MD/MT per 10 client samples	☑ YES	☐ NO		
3. MD RPD/MT RSD ≤ 25%	☑ PASS	☐ FAIL		
4. For TSS analysis, Preparation Blanks < 5 mg/L.	☐ YES	☐ NO	☑ N/A	
5. For TSS analysis, Holding Time is 28 days from sample collection date.	☐ YES	☐ NO	☑ N/A	
6. Are qualifiers, O-04 and O-09, included for samples analyzed out of hold time.	☑ YES	☐ NO	☐ N/A	

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 200-5311-1

SDG Number: 5311

Job Description: CDM Organotin Project

For:
Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605

Attention: Nicole L. Maljovec



Approved for release.
James W Madison
Project Manager I
06/13/11 9:55 AM

James W Madison
Project Manager I
jim.madison@testamericainc.com
06/13/2011
Revision: 1

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

Table of Contents

Cover Title Page 1

Data Summaries 4

- Report Narrative 4
- Manual Integration Summary 5
- Sample Summary 7
- Method Summary 8
- Method / Analyst Summary 9
- Sample Datasheets 10
- Surrogate Summary 18
- QC Data Summary 20
- Data Qualifiers 25
- QC Association Summary 26
- Lab Chronicle 27

Organic Sample Data 29

- GC Semi VOA 29
  - Method Organotins 29
    - Method Organotins QC Summary 30
    - Method Organotins Sample Data 44
    - Standards Data 62
      - Method Organotins ICAL Data 62
      - Method Organotins CCAL Data 98
    - Raw QC Data 118
      - Method Organotins Blank Data 118
      - Method Organotins LCS/LCSD Data 130
      - Method Organotins MS/MSD Data 147
      - Method Organotins Duplicate/Triplicate Data 164

Table of Contents

Method Organotins Run Logs 170

Method Organotins Prep Data 173

Inorganic Sample Data 177

General Chemistry Data 177

Gen Chem Cover Page 178

Gen Chem MDL 179

Gen Chem Analysis Run Log 180

Gen Chem Prep Data 181

Shipping and Receiving Documents 182

Client Chain of Custody 183

Sample Receipt Checklist 187

CASE NARRATIVE

Client: Lancaster Laboratories

Project: CDM Organotin Project

Report Number: 200-5311-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 05/25/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.0 C.

ORGANOTINS (Alkyltins) BY GC/FPD

Solid samples SED-035-SIV-SDMS and DUP03-SIV-QC-052311 were analyzed for Alkyltins by GC/FPD in accordance with TestAmerica Burlington SOP. The samples were prepared on 06/01/2011 and analyzed on 06/02/2011. Liquid sample FB078-SIV-052311 was also analyzed for Alkyltins, and was prepared on 05/26/2011 and analyzed on 06/02/2011.

The alkyltin analyses were accomplished using an internal standard method of analysis with tetra-n-propyltin as the internal standard. Peak areas were used to measure the instrument response in performing calibration and quantification. The analytical report forms correctly list the alkyltin analytes as unsubstituted alkyltin compounds. The analysis of three of the compounds employed the use of alkyltin chlorides. The results from the alkyltin chlorides required conversion factors to reflect the concentrations of the unsubstituted forms. For instance, tributyltin chloride was converted to tributyltin using a conversion factor of 0.89. Dibutyltin dichloride was converted to dibutyltin using a factor of 0.77. Monobutyltin trichloride was converted to monobutyltin using a factor of 0.62 and the surrogate, tripentyltin chloride was converted to tripentyltin using a factor of 0.90.

Note that Monobutyltin is known to have poor extraction efficiency, and the laboratory considers all results for this compound to be qualitative. All results for Monobutyltin (both detect and non-detect) are reported with a 'J' flag to indicate they are estimates. Although the definition of the J qualifier in this report is a result between MDL and RL, Monobutyltin was not detected in the samples in this delivery group, and in this case the J qualifier only implies that the results are qualitative. Although the solid blank spike sample yielded 39 % recovery of Monobutyltin, this compound was not recovered in matrix spikes performed on sample SED-035-SIV-SDMS. The liquid blank spike sample yielded 6% recovery of Monobutyltin, below the default control limits of 10-48%.

No other difficulties were encountered during the organotin analyses.

All other quality control parameters were within the acceptance limits.

PERCENT SOLIDS

Samples SED-035-SIV-SDMS and DUP03-SIV-QC-052311 were analyzed for percent solids in accordance with EPA SW846 3550C. The samples were analyzed on 05/25/2011.

No difficulties were encountered during the % solids analyses.

All quality control parameters were within the acceptance limits.

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Instrument ID: 2860.i Analysis Batch Number: 19102

Lab Sample ID: IC 200-19102/5 Client Sample ID:

Date Analyzed: 06/02/11 13:50 Lab File ID: 02jun110958-r071.d GC Column: RTX-35 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetra-n-propyl tin	3.07	Peak not found by the data system	wbr	06/03/11 12:42
Monobutyltin	8.02	Analyte misidentified by the data system	wbr	06/03/11 12:43

GC SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Instrument ID: 2860.i Analysis Batch Number: 19104

Lab Sample ID: 200-5311-1 MS Client Sample ID: SED-035-SIV-SDMS MS

Date Analyzed: 06/02/11 16:06 Lab File ID: 02jun111106-r061.d GC Column: RTX-35 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Monobutyltin	8.02	Not specified	wbr	06/03/11 12:56

Lab Sample ID: LCS 200-18670/2-A Client Sample ID:

Date Analyzed: 06/02/11 16:56 Lab File ID: 02jun111106-r091.d GC Column: RTX-35 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Monobutyltin	8.02	Analyte misidentified by the data system	wbr	06/03/11 12:58

SAMPLE SUMMARY

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
200-5311-1	SED-035-SIV-SDMS	Solid	05/23/2011 1500	05/25/2011 1015
200-5311-1MS	SED-035-SIV-SDMS	Solid	05/23/2011 1500	05/25/2011 1015
200-5311-1MSD	SED-035-SIV-SDMS	Solid	05/23/2011 1500	05/25/2011 1015
200-5311-1DU	SED-035-SIV-SDMS	Solid	05/23/2011 1500	05/25/2011 1015
200-5311-2	DUP03-SIV-QC-052311	Solid	05/23/2011 1510	05/25/2011 1015
200-5311-3	FB08-SIV-052311	Water	05/23/2011 1600	05/25/2011 1015

METHOD SUMMARY

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Organotins (GC/FPD)	TAL BUR	TestAmerica SOP Organotins/GC	
Ultrasonic Extraction	TAL BUR		SW846 3550B
Percent Moisture	TAL BUR	EPA Moisture	
Matrix: Water			
Organotins (GC/FPD)	TAL BUR	TestAmerica SOP Organotins/GC	
Liquid-Liquid Extraction (Separatory Funnel)	TAL BUR		SW846 3510C

Lab References:

TAL BUR = TestAmerica Burlington

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TestAmerica SOP = TestAmerica, Inc., Standard Operating Procedure

METHOD / ANALYST SUMMARY

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Method	Analyst	Analyst ID
TestAmerica SOP Organotins/GC	Robinson, Wallace B	WBR
EPA Moisture	Nelson, Andrea J	AJN

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Client Sample ID: **SED-035-SIV-SDMS**

Lab Sample ID: 200-5311-1
Client Matrix: Solid
% Moisture: 48.1

Date Sampled: 05/23/2011 1500
Date Received: 05/25/2011 1015

Organotins/GC Organotins (GC/FPD)

Analysis Method:	Organotins/GC	Analysis Batch:	200-19104	Instrument ID:	2860.i
Prep Method:	3550B	Prep Batch:	200-18879	Initial Weight/Volume:	30.26 g
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/02/2011 1515			Injection Volume:	1.5 uL
Prep Date:	06/01/2011 1738			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Tetrabutyltin		3.2	U	0.84	3.2
Tributyltin		2.9	U	1.3	2.9
Dibutyltin		2.5	U	0.76	2.5
Monobutyltin		9.5	U J	9.5	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
Tripentyltin	91		30 - 120

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Client Sample ID: **SED-035-SIV-SDMS**

Lab Sample ID: 200-5311-1
Client Matrix: Solid
% Moisture: 48.1

Date Sampled: 05/23/2011 1500
Date Received: 05/25/2011 1015

Organotins/GC Organotins (GC/FPD)

Analysis Method:	Organotins/GC	Analysis Batch:	200-19104	Instrument ID:	2860.i
Prep Method:	3550B	Prep Batch:	200-18879	Initial Weight/Volume:	30.26 g
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/02/2011 1515			Injection Volume:	1.5 uL
Prep Date:	06/01/2011 1738			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tripentyltin	101		30 - 120

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Client Sample ID: **DUP03-SIV-QC-052311**

Lab Sample ID: 200-5311-2
Client Matrix: Solid
% Moisture: 45.9

Date Sampled: 05/23/2011 1510
Date Received: 05/25/2011 1015

Organotins/GC Organotins (GC/FPD)

Analysis Method:	Organotins/GC	Analysis Batch:	200-19104	Instrument ID:	2860.i
Prep Method:	3550B	Prep Batch:	200-18879	Initial Weight/Volume:	30.78 g
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/02/2011 1549			Injection Volume:	1.5 uL
Prep Date:	06/01/2011 1738			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Tetrabutyltin		3.1	U	0.79	3.1
Tributyltin		2.7	U	1.2	2.7
Dibutyltin		2.3	U	0.72	2.3
Monobutyltin		9.0	U J	9.0	9.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Tripentyltin	90		30 - 120

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Client Sample ID: **DUP03-SIV-QC-052311**

Lab Sample ID: 200-5311-2
Client Matrix: Solid % Moisture: 45.9

Date Sampled: 05/23/2011 1510
Date Received: 05/25/2011 1015

Organotins/GC Organotins (GC/FPD)

Analysis Method:	Organotins/GC	Analysis Batch:	200-19104	Instrument ID:	2860.i
Prep Method:	3550B	Prep Batch:	200-18879	Initial Weight/Volume:	30.78 g
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/02/2011 1549			Injection Volume:	1.5 uL
Prep Date:	06/01/2011 1738			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tripentyltin	95		30 - 120

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Client Sample ID: **FB08-SIV-052311**

Lab Sample ID: 200-5311-3
Client Matrix: Water

Date Sampled: 05/23/2011 1600
Date Received: 05/25/2011 1015

Organotins/GC Organotins (GC/FPD)

Analysis Method:	Organotins/GC	Analysis Batch:	200-19104	Instrument ID:	2860.i
Prep Method:	3510C	Prep Batch:	200-18670	Initial Weight/Volume:	1040 mL
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/02/2011 1713			Injection Volume:	1.5 uL
Prep Date:	05/26/2011 2040			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Tetrabutyltin	0.048	U	0.012	0.048
Tributyltin	0.043	U	0.012	0.043
Dibutyltin	0.038	U	0.0081	0.038
Monobutyltin	0.48	U J *	0.48	0.48

Surrogate	%Rec	Qualifier	Acceptance Limits
Tripentyltin	88		15 - 150

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Client Sample ID: **FB08-SIV-052311**

Lab Sample ID: 200-5311-3
Client Matrix: Water

Date Sampled: 05/23/2011 1600
Date Received: 05/25/2011 1015

Organotins/GC Organotins (GC/FPD)

Analysis Method:	Organotins/GC	Analysis Batch:	200-19104	Instrument ID:	2860.i
Prep Method:	3510C	Prep Batch:	200-18670	Initial Weight/Volume:	1040 mL
Dilution:	1.0			Final Weight/Volume:	1000 uL
Analysis Date:	06/02/2011 1713			Injection Volume:	1.5 uL
Prep Date:	05/26/2011 2040			Result Type:	SECONDARY

Surrogate	%Rec	Qualifier	Acceptance Limits
Tripentyltin	91		15 - 150

General Chemistry

Client Sample ID: **SED-035-SIV-SDMS**

Lab Sample ID: 200-5311-1
Client Matrix: Solid

Date Sampled: 05/23/2011 1500
Date Received: 05/25/2011 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Solids	51.9		%	0.25	0.25	1.0	Moisture

Analysis Batch: 200-18581 Analysis Date: 05/25/2011 1402 DryWt Corrected: N

General Chemistry

Client Sample ID: **DUP03-SIV-QC-052311**

Lab Sample ID: 200-5311-2
Client Matrix: Solid

Date Sampled: 05/23/2011 1510
Date Received: 05/25/2011 1015

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Percent Solids	54.1		%	0.25	0.25	1.0	Moisture

Analysis Batch: 200-18581 Analysis Date: 05/25/2011 1402 DryWt Corrected: N

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Surrogate Recovery Report

Organotins/GC Organotins (GC/FPD)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TPT1 %Rec	TPT2 %Rec
200-5311-1	SED-035-SIV-SDMS	101	91
200-5311-2	DUP03-SIV-QC-052311	95	90
MB 200-18879/1-A		102	99
LCS 200-18879/2-A		97	96
200-5311-1 MS	SED-035-SIV-SDMS MS	97	90
200-5311-1 MSD	SED-035-SIV-SDMS MSD	107	109
200-5311-1 DU	SED-035-SIV-SDMS DU	103	95

Surrogate	Acceptance Limits
TPT = Tripentyltin	30-120

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Surrogate Recovery Report

Organotins/GC Organotins (GC/FPD)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TPT1 %Rec	TPT2 %Rec
200-5311-3	FB08-SIV-052311	91	88
MB 200-18670/1-A		101	97
LCS 200-18670/2-A		83	86

Surrogate	Acceptance Limits
TPT = Tripentyltin	15-150

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Method Blank - Batch: 200-18670

Method: Organotins/GC
Preparation: 3510C

Lab Sample ID:	MB 200-18670/1-A	Analysis Batch:	200-19104	Instrument ID:	2860.i
Client Matrix:	Water	Prep Batch:	200-18670	Lab File ID:	02jun111106-r081.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	06/02/2011 1640	Units:	ug/L	Final Weight/Volume:	1000 uL
Prep Date:	05/26/2011 2040			Injection Volume:	1.5 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Tetrabutyltin	0.050	U	0.012	0.050
Tributyltin	0.045	U	0.012	0.045
Dibutyltin	0.039	U	0.0084	0.039
Monobutyltin	0.50	U J	0.50	0.50

Surrogate	% Rec	Acceptance Limits
Tripentyltin	97	15 - 150

Surrogate	% Rec	Acceptance Limits
Tripentyltin	101	15 - 150

Lab Control Sample - Batch: 200-18670

Method: Organotins/GC
Preparation: 3510C

Lab Sample ID:	LCS 200-18670/2-A	Analysis Batch:	200-19104	Instrument ID:	2860.i
Client Matrix:	Water	Prep Batch:	200-18670	Lab File ID:	02jun111106-r091.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	06/02/2011 1656	Units:	ug/L	Final Weight/Volume:	1000 uL
Prep Date:	05/26/2011 2040			Injection Volume:	1.5 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Tetrabutyltin	0.500	0.389	78	30 - 150	
Tributyltin	0.445	0.337	76	30 - 150	
Dibutyltin	0.385	0.295	77	30 - 150	
Monobutyltin	0.310	0.50	6	10 - 48	U J *

Surrogate	% Rec	Acceptance Limits
Tripentyltin	83	15 - 150

Surrogate	% Rec	Acceptance Limits
Tripentyltin	86	15 - 150

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Method Blank - Batch: 200-18879

Method: Organotins/GC
Preparation: 3550B

Lab Sample ID:	MB 200-18879/1-A	Analysis Batch:	200-19104	Instrument ID:	2860.i
Client Matrix:	Solid	Prep Batch:	200-18879	Lab File ID:	02jun111106-r011.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.00 g
Analysis Date:	06/02/2011 1441	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	06/01/2011 1738			Injection Volume:	1.5 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Tetrabutyltin	1.7	U	0.44	1.7
Tributyltin	1.5	U	0.67	1.5
Dibutyltin	1.3	U	0.40	1.3
Monobutyltin	5.0	U J	5.0	5.0

Surrogate	% Rec	Acceptance Limits
Tripentyltin	99	30 - 120

Surrogate	% Rec	Acceptance Limits
Tripentyltin	102	30 - 120

Lab Control Sample - Batch: 200-18879

Method: Organotins/GC
Preparation: 3550B

Lab Sample ID:	LCS 200-18879/2-A	Analysis Batch:	200-19104	Instrument ID:	2860.i
Client Matrix:	Solid	Prep Batch:	200-18879	Lab File ID:	02jun111106-r021.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.00 g
Analysis Date:	06/02/2011 1458	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	06/01/2011 1738			Injection Volume:	1.5 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Tetrabutyltin	16.7	13.8	83	30 - 160	
Tributyltin	14.8	13.4	91	30 - 160	
Dibutyltin	12.8	10.7	83	30 - 160	
Monobutyltin	10.3	5.0	39	10 - 48	U J

Surrogate	% Rec	Acceptance Limits
Tripentyltin	96	30 - 120

Surrogate	% Rec	Acceptance Limits
Tripentyltin	97	30 - 120

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-18879

Method: Organotins/GC
Preparation: 3550B

MS Lab Sample ID:	200-5311-1	Analysis Batch:	200-19104	Instrument ID:	2860.i
Client Matrix:	Solid	Prep Batch:	200-18879	Lab File ID:	02jun111106-r061.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.92 g
Analysis Date:	06/02/2011 1606			Final Weight/Volume:	1000 uL
Prep Date:	06/01/2011 1738			Injection Volume:	1.5 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	200-5311-1	Analysis Batch:	200-19104	Instrument ID:	2860.i
Client Matrix:	Solid	Prep Batch:	200-18879	Lab File ID:	02jun111106-r071.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.56 g
Analysis Date:	06/02/2011 1623			Final Weight/Volume:	1000 uL
Prep Date:	06/01/2011 1738			Injection Volume:	1.5 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Tetrabutyltin	88	90	30 - 160	3	30		
Tributyltin	96	96	30 - 160	2	30		
Dibutyltin	92	94	30 - 160	2	30		
Monobutyltin	0	0	10 - 48	NC	30	U J F	U J F

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Tripentyltin	90	107	30 - 120

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Tripentyltin	97	109	30 - 120

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 200-18879

Method: Organotins/GC
Preparation: 3550B

MS Lab Sample ID:	200-5311-1	Units:	ug/Kg
Client Matrix:	Solid		
Dilution:	1.0		
Analysis Date:	06/02/2011 1606		
Prep Date:	06/01/2011 1738		
Leach Date:	N/A		

MSD Lab Sample ID:	200-5311-1
Client Matrix:	Solid
Dilution:	1.0
Analysis Date:	06/02/2011 1623
Prep Date:	06/01/2011 1738
Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Tetrabutyltin	3.2	U	31.1	31.5	27.5		28.4	
Tributyltin	2.9	U	27.7	28.0	26.5		27.0	
Dibutyltin	2.5	U	24.0	24.3	22.2		22.7	
Monobutyltin	9.5	U	19.3	19.5	9.3	U J F	9.5	U J F

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Duplicate - Batch: 200-18879

Method: Organotins/GC
Preparation: 3550B

Lab Sample ID:	200-5311-1	Analysis Batch:	200-19104	Instrument ID:	2860.i
Client Matrix:	Solid	Prep Batch:	200-18879	Lab File ID:	02jun111106-r041.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.20 g
Analysis Date:	06/02/2011 1532	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	06/01/2011 1738			Injection Volume:	1.5 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Tetrabutyltin	3.2	U	3.1	NC	30	U
Tributyltin	2.9	U	2.7	NC	30	U
Dibutyltin	2.5	U	2.4	NC	30	U
Monobutyltin	9.5	U	9.1	NC	30	U J

Surrogate	% Rec	Acceptance Limits
Tripentyltin	95	30 - 120

Surrogate	% Rec	Acceptance Limits
Tripentyltin	103	30 - 120

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Duplicate - Batch: 200-18581

Method: Moisture
Preparation: N/A

Lab Sample ID:	200-5311-1	Analysis Batch:	200-18581	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	05/25/2011 1402	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Solids	51.9	54.4	4.56		

DATA REPORTING QUALIFIERS

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

Lab Section	Qualifier	Description
GC Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS/MSD Recovery or RPD exceeds the control limits
	*	Recovery or RPD exceeds control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Client: Lancaster Laboratories

Job Number: 200-5311-1
Sdg Number: 5311

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 200-18670					
LCS 200-18670/2-A	Lab Control Sample	T	Water	3510C	
MB 200-18670/1-A	Method Blank	T	Water	3510C	
200-5311-3	FB08-SIV-052311	T	Water	3510C	
Prep Batch: 200-18879					
LCS 200-18879/2-A	Lab Control Sample	T	Solid	3550B	
MB 200-18879/1-A	Method Blank	T	Solid	3550B	
200-5311-1	SED-035-SIV-SDMS	T	Solid	3550B	
200-5311-1DU	Duplicate	T	Solid	3550B	
200-5311-1MS	Matrix Spike	T	Solid	3550B	
200-5311-1MSD	Matrix Spike Duplicate	T	Solid	3550B	
200-5311-2	DUP03-SIV-QC-052311	T	Solid	3550B	
Analysis Batch:200-19104					
LCS 200-18670/2-A	Lab Control Sample	T	Water	Organotins/GC	200-18670
MB 200-18670/1-A	Method Blank	T	Water	Organotins/GC	200-18670
LCS 200-18879/2-A	Lab Control Sample	T	Solid	Organotins/GC	200-18879
MB 200-18879/1-A	Method Blank	T	Solid	Organotins/GC	200-18879
200-5311-1	SED-035-SIV-SDMS	T	Solid	Organotins/GC	200-18879
200-5311-1DU	Duplicate	T	Solid	Organotins/GC	200-18879
200-5311-1MS	Matrix Spike	T	Solid	Organotins/GC	200-18879
200-5311-1MSD	Matrix Spike Duplicate	T	Solid	Organotins/GC	200-18879
200-5311-2	DUP03-SIV-QC-052311	T	Solid	Organotins/GC	200-18879
200-5311-3	FB08-SIV-052311	T	Water	Organotins/GC	200-18670

Report Basis
T = Total

General Chemistry

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Analysis Batch:200-18581					
200-5311-1	SED-035-SIV-SDMS	T	Solid	Moisture	
200-5311-1DU	Duplicate	T	Solid	Moisture	
200-5311-2	DUP03-SIV-QC-052311	T	Solid	Moisture	

Report Basis
T = Total

Client: Lancaster Laboratories

Job Number: 200-5311-1
SDG: 5311

Laboratory Chronicle

Lab ID: 200-5311-1 **Client ID: SED-035-SIV-SDMS**

Sample Date/Time: 05/23/2011 15:00 Received Date/Time: 05/25/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	200-5311-A-1-A		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	200-5311-A-1-A		200-19104	200-18879	06/02/2011 15:15	1	TAL BUR	WBR
A:Moisture	200-5311-A-1		200-18581		05/25/2011 14:02	1	TAL BUR	AJN

Lab ID: 200-5311-1 **Client ID: SED-035-SIV-SDMS**

Sample Date/Time: 05/23/2011 15:00 Received Date/Time: 05/25/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	200-5311-A-1-D MS		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	200-5311-A-1-D MS		200-19104	200-18879	06/02/2011 16:06	1	TAL BUR	WBR

Lab ID: 200-5311-1 **Client ID: SED-035-SIV-SDMS**

Sample Date/Time: 05/23/2011 15:00 Received Date/Time: 05/25/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	200-5311-A-1-C MSD		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	200-5311-A-1-C MSD		200-19104	200-18879	06/02/2011 16:23	1	TAL BUR	WBR

Lab ID: 200-5311-1 **Client ID: SED-035-SIV-SDMS**

Sample Date/Time: 05/23/2011 15:00 Received Date/Time: 05/25/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	200-5311-A-1-B DU		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	200-5311-A-1-B DU		200-19104	200-18879	06/02/2011 15:32	1	TAL BUR	WBR
A:Moisture	200-5311-A-1 DU		200-18581		05/25/2011 14:02	1	TAL BUR	AJN

Lab ID: 200-5311-2 **Client ID: DUP03-SIV-QC-052311**

Sample Date/Time: 05/23/2011 15:10 Received Date/Time: 05/25/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	200-5311-A-2-A		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	200-5311-A-2-A		200-19104	200-18879	06/02/2011 15:49	1	TAL BUR	WBR
A:Moisture	200-5311-A-2		200-18581		05/25/2011 14:02	1	TAL BUR	AJN

Client: Lancaster Laboratories

Job Number: 200-5311-1
SDG: 5311

Laboratory Chronicle

Lab ID: 200-5311-3 **Client ID: FB08-SIV-052311**

Sample Date/Time: 05/23/2011 16:00 Received Date/Time: 05/25/2011 10:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3510C	200-5311-A-3-A		200-19104	200-18670	05/26/2011 20:40	1	TAL BUR	JFF
A:Organotins/GC	200-5311-A-3-A		200-19104	200-18670	06/02/2011 17:13	1	TAL BUR	WBR

Lab ID: MB **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	MB 200-18879/1-A		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	MB 200-18879/1-A		200-19104	200-18879	06/02/2011 14:41	1	TAL BUR	WBR
P:3510C	MB 200-18670/1-A		200-19104	200-18670	05/26/2011 20:40	1	TAL BUR	JFF
A:Organotins/GC	MB 200-18670/1-A		200-19104	200-18670	06/02/2011 16:40	1	TAL BUR	WBR

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3550B	LCS 200-18879/2-A		200-19104	200-18879	06/01/2011 17:38	1	TAL BUR	TPB
A:Organotins/GC	LCS 200-18879/2-A		200-19104	200-18879	06/02/2011 14:58	1	TAL BUR	WBR
P:3510C	LCS 200-18670/2-A		200-19104	200-18670	05/26/2011 20:40	1	TAL BUR	JFF
A:Organotins/GC	LCS 200-18670/2-A		200-19104	200-18670	06/02/2011 16:56	1	TAL BUR	WBR

Lab References:
TAL BUR = TestAmerica Burlington

Method Organotins

Organotins (GC/FPD) by Method Organotins

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Matrix: Solid Level: Low

GC Column (1): RTX-35 ID: 0.32(mm) GC Column (2): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	TPT1 #	TPT2 #
SED-035-SIV-SDMS	200-5311-1	101	91
DUP03-SIV-QC-052311	200-5311-2	95	90
	MB 200-18879/1-A	102	99
	LCS 200-18879/2-A	97	96
SED-035-SIV-SDMS MS	200-5311-1 MS	97	90
SED-035-SIV-SDMS MSD	200-5311-1 MSD	107	109
SED-035-SIV-SDMS DU	200-5311-1 DU	103	95

	QC LIMITS
TPT = Tripentyltin	30-120

Column to be used to flag recovery values

FORM II Organotins/GC

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Matrix: Water Level: Low

GC Column (1): RTX-35 ID: 0.32(mm) GC Column (2): RTX-5 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	TPT1 #	TPT2 #
FB08-SIV-052311	200-5311-3	91	88
	MB 200-18670/1-A	101	97
	LCS 200-18670/2-A	83	86

	QC LIMITS
TPT = Tripentyltin	15-150

Column to be used to flag recovery values

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Matrix: Water Level: Low Lab File ID: 02jun111106-r091.d

Lab ID: LCS 200-18670/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Tetrabutyltin	0.500	0.389	78	30-150	
Tributyltin	0.445	0.337	76	30-150	
Dibutyltin	0.385	0.295	77	30-150	
Monobutyltin	0.310	0.50U J	6	10-48	*

Column to be used to flag recovery and RPD values

FORM III Organotins/GC

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Matrix: Solid Level: Low Lab File ID: 02jun111106-r021.d

Lab ID: LCS 200-18879/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Tetrabutyltin	16.7	13.8	83	30-160	
Tributyltin	14.8	13.4	91	30-160	
Dibutyltin	12.8	10.7	83	30-160	
Monobutyltin	10.3	5.0U J	39	10-48	

Column to be used to flag recovery and RPD values

FORM III Organotins/GC

FORM III
GC SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Matrix: Solid Level: Low Lab File ID: 02jun111106-r061.d

Lab ID: 200-5311-1 MS Client ID: SED-035-SIV-SDMS MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Tetrabutyltin	31.1	3.2 U	27.5	88	30-160	
Tributyltin	27.7	2.9 U	26.5	96	30-160	
Dibutyltin	24.0	2.5 U	22.2	92	30-160	
Monobutyltin	19.3	9.5U J	9.3U J	0	10-48	F

Column to be used to flag recovery and RPD values

FORM III Organotins/GC

FORM III
GC SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Matrix: Solid Level: Low Lab File ID: 02jun111106-r071.d

Lab ID: 200-5311-1 MSD Client ID: SED-035-SIV-SDMS MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Tetrabutyltin	31.5	28.4	90	3	30	30-160	
Tributyltin	28.0	27.0	96	2	30	30-160	
Dibutyltin	24.3	22.7	94	2	30	30-160	
Monobutyltin	19.5	9.5U J	0	NC	30	10-48	F

Column to be used to flag recovery and RPD values

FORM III Organotins/GC

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Lab Sample ID: MB 200-18670/1-A

Matrix: Water Date Extracted: 05/26/2011 20:40

Lab File ID:(1) 02jun111106-r081.d Lab File ID:(2) 02jun111106-r081.d

Date Analyzed:(1) 06/02/2011 16:40 Date Analyzed:(2) 06/02/2011 16:40

Instrument ID:(1) 2860.i Instrument ID:(2) 2860.i

GC Column:(1) RTX-35 ID: 0.32(mm) GC Column:(2) RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 200-18670/2-A	06/02/2011 16:56	06/02/2011 16:56
FB08-SIV-052311	200-5311-3	06/02/2011 17:13	06/02/2011 17:13

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Lab Sample ID: MB 200-18879/1-A

Matrix: Solid Date Extracted: 06/01/2011 17:38

Lab File ID:(1) 02jun111106-r011.d Lab File ID:(2) 02jun111106-r011.d

Date Analyzed:(1) 06/02/2011 14:41 Date Analyzed:(2) 06/02/2011 14:41

Instrument ID:(1) 2860.i Instrument ID:(2) 2860.i

GC Column:(1) RTX-35 ID: 0.32(mm) GC Column:(2) RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 200-18879/2-A	06/02/2011 14:58	06/02/2011 14:58
SED-035-SIV-SDMS	200-5311-1	06/02/2011 15:15	06/02/2011 15:15
SED-035-SIV-SDMS DU	200-5311-1 DU	06/02/2011 15:32	06/02/2011 15:32
DUP03-SIV-QC-052311	200-5311-2	06/02/2011 15:49	06/02/2011 15:49
SED-035-SIV-SDMS MS	200-5311-1 MS	06/02/2011 16:06	06/02/2011 16:06
SED-035-SIV-SDMS MSD	200-5311-1 MSD	06/02/2011 16:23	06/02/2011 16:23

FORM VIII
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Sample No.: ICRT 200-19102/3 Date Analyzed: 06/02/2011 13:16

Instrument ID: 2860.i GC Column: RTX-35 ID: 0.32(mm)

Lab File ID (Standard): 02jun110958-r051.d Heated Purge: (Y/N) N

Calibration ID: 7089

		TPT					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION SURROGATE		217441	7.55				
UPPER LIMIT			7.60				
LOWER LIMIT			7.50				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-18879/1-A		458751	7.56				
LCS 200-18879/2-A		430975	7.56				
200-5311-1	SED-035-SIV-SDMS	439526	7.56				
200-5311-1 DU	SED-035-SIV-SDMS DU	440301	7.56				
200-5311-2	DUP03-SIV-QC-052311	407373	7.57				
200-5311-1 MS	SED-035-SIV-SDMS MS	410828	7.57				
200-5311-1 MSD	SED-035-SIV-SDMS MSD	485466	7.56				
MB 200-18670/1-A		438129	7.57				
LCS 200-18670/2-A		458045	7.57				
200-5311-3	FB08-SIV-052311	407113	7.56				
CCV 200-19104/11		225986	7.57				

TPT = Tripentyltin

TPT RT Limit = ± 0 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII ORGANOTINS/GC

FORM VIII
GC SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Sample No.: ICRT 200-19102/3 Date Analyzed: 06/02/2011 13:16

Instrument ID: 2860.i GC Column: RTX-5 ID: 0.32(mm)

Lab File ID (Standard): 02jun110958-r051.d Heated Purge: (Y/N) N

Calibration ID: 7090

		TPT					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION SURROGATE		253291	8.68				
UPPER LIMIT			8.73				
LOWER LIMIT			8.63				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 200-18879/1-A		488762	8.68				
LCS 200-18879/2-A		481303	8.69				
200-5311-1	SED-035-SIV-SDMS	462531	8.69				
200-5311-1 DU	SED-035-SIV-SDMS DU	468704	8.68				
200-5311-2	DUP03-SIV-QC-052311	429763	8.70				
200-5311-1 MS	SED-035-SIV-SDMS MS	434193	8.69				
200-5311-1 MSD	SED-035-SIV-SDMS MSD	529582	8.69				
MB 200-18670/1-A		472209	8.69				
LCS 200-18670/2-A		527940	8.69				
200-5311-3	FB08-SIV-052311	433640	8.69				
CCV 200-19104/11		251691	8.70				

TPT = Tripentyltin

TPT RT Limit = ± 0 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII ORGANOTINS/GC

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: SED-035-SIV-SDMS MS Lab Sample ID: 200-5311-1 MS

Instrument ID (1): 2860.i Instrument ID (2): 2860.i

Date Analyzed (1): 06/02/2011 16:06 Date Analyzed (2): 06/02/2011 16:06

GC Column (1): RTX-35 ID: 0.32(mm) GC Column (2): RTX-5 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Tetrabutyltin	1		5.30	5.23	5.33	28.8		4.4
	2		6.45	6.39	6.49	27.5		
Tributyltin	1		6.32	6.25	6.35	26.5		0.9
	2		7.44	7.38	7.48	26.7		
Dibutyltin	1		7.22	7.14	7.24	22.2		3.0
	2		8.32	8.26	8.36	22.8		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: SED-035-SIV-SDMS MSD Lab Sample ID: 200-5311-1 MSD

Instrument ID (1): 2860.i Instrument ID (2): 2860.i

Date Analyzed (1): 06/02/2011 16:23 Date Analyzed (2): 06/02/2011 16:23

GC Column (1): RTX-35 ID: 0.32(mm) GC Column (2): RTX-5 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Tetrabutyltin	1		5.29	5.23	5.33	28.4		0.1
	2		6.45	6.39	6.49	28.4		
Tributyltin	1		6.31	6.25	6.35	27.0		2.5
	2		7.44	7.38	7.48	27.7		
Dibutyltin	1		7.20	7.14	7.24	22.7		7.9
	2		8.32	8.26	8.36	24.6		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: Lab Sample ID: LCS 200-18670/2-A

Instrument ID (1): 2860.i Instrument ID (2): 2860.i

Date Analyzed (1): 06/02/2011 16:56 Date Analyzed (2): 06/02/2011 16:56

GC Column (1): RTX-35 ID: 0.32(mm) GC Column (2): RTX-5 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Tetrabutyltin	1		5.30	5.23	5.33	0.396		1.9
	2		6.45	6.39	6.49	0.389		
Tributyltin	1		6.32	6.25	6.35	0.350		3.8
	2		7.44	7.38	7.48	0.337		
Dibutyltin	1		7.21	7.14	7.24	0.295		2.5
	2		8.32	8.26	8.36	0.303		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: Lab Sample ID: LCS 200-18879/2-A

Instrument ID (1): 2860.i Instrument ID (2): 2860.i

Date Analyzed (1): 06/02/2011 14:58 Date Analyzed (2): 06/02/2011 14:58

GC Column (1): RTX-35 ID: 0.32(mm) GC Column (2): RTX-5 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Tetrabutyltin	1		5.29	5.23	5.33	15.3		10.0
	2		6.45	6.39	6.49	13.8		
Tributyltin	1		6.31	6.25	6.35	13.6		1.0
	2		7.44	7.38	7.48	13.4		
Dibutyltin	1		7.20	7.14	7.24	10.7		1.8
	2		8.32	8.26	8.36	10.9		

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: SED-035-SIV-SDMS | Lab Sample ID: 200-5311-1

Matrix: Solid | Lab File ID: 02jun111106-r031.d

Analysis Method: Organotins/GC | Date Collected: 05/23/2011 15:00

Extraction Method: 3550B | Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.26(g) | Date Analyzed: 06/02/2011 15:15

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1.5(uL) | GC Column: RTX-35 ID: 0.32(mm)

% Moisture: 48.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	3.2	U	3.2	0.84
688-73-3	Tributyltin	2.9	U	2.9	1.3
1002-53-5	Dibutyltin	2.5	U	2.5	0.76
2406-65-7	Monobutyltin	9.5	U J	9.5	9.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	101		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1
Client Smp ID: SED-035-SIV-SDMS
Inj Date : 02-JUN-2011 15:15
Operator : WBR Inst ID: 2860_1.i
Smp Info : 200-5311-A-1-A
Misc Info : 200-5311-A-1-A
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

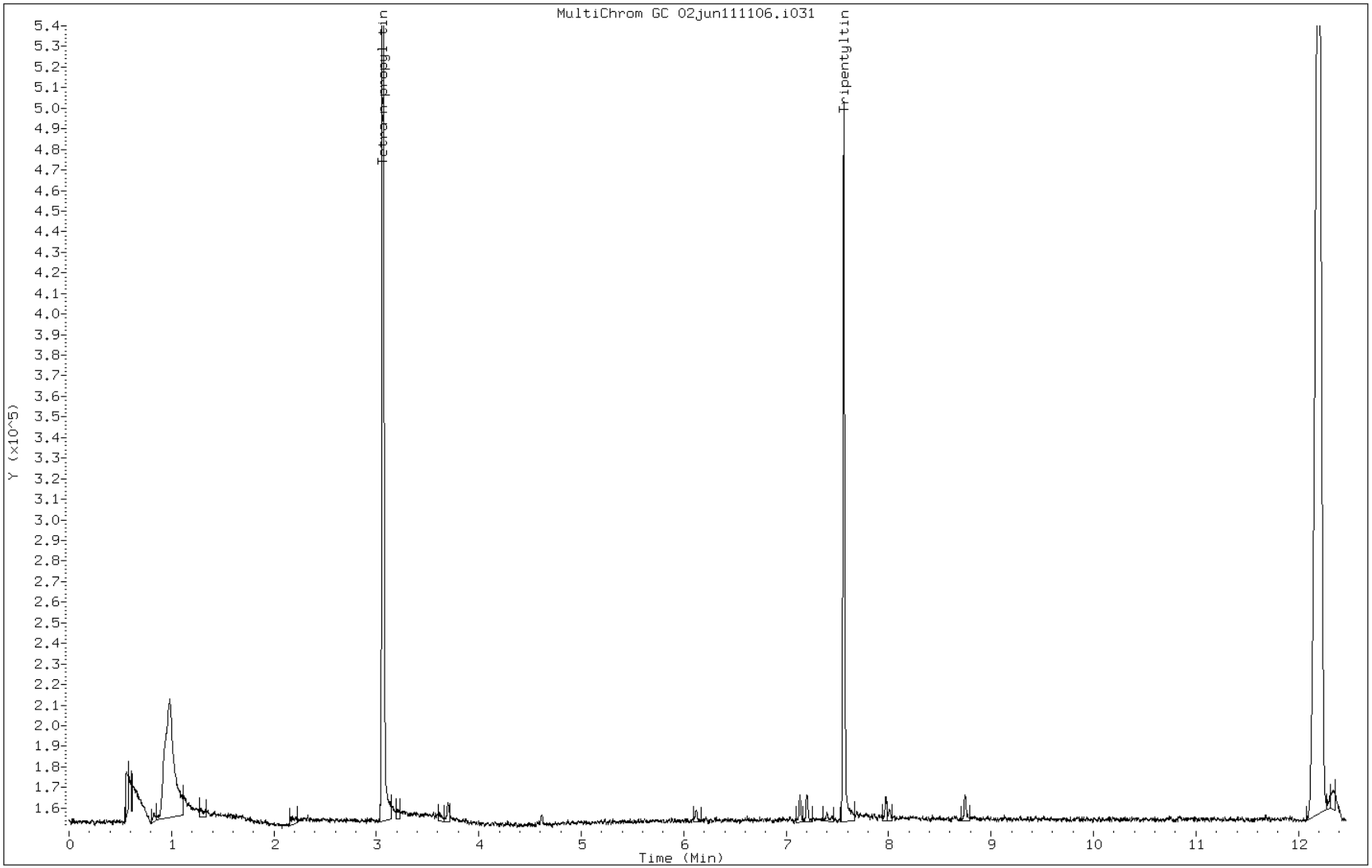
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
*	1 Tetra-n-propyl tin				CAS #: 2176-98-9
	3.063	3.017 (1.000)	713272	500.000	
$	5 Tripentyltin				CAS #: 3342-67-4
	7.563	7.554 (2.469)	439526	456.497	456.5

Data File: 02jun111106-r031.d
Client ID: SED-035-SIV-SDMS
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: 200-5311-A-1-A
Lab Sample ID: 200-5311-1

Date: 02-JUN-2011 15:15
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: SED-035-SIV-SDMS Lab Sample ID: 200-5311-1

Matrix: Solid Lab File ID: 02jun111106-r031.d

Analysis Method: Organotins/GC Date Collected: 05/23/2011 15:00

Extraction Method: 3550B Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.26(g) Date Analyzed: 06/02/2011 15:15

Con. Extract Vol.: 1000(uL) Dilution Factor: 1

Injection Volume: 1.5(uL) GC Column: RTX-5 ID: 0.32(mm)

% Moisture: 48.1 GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	91		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1
Client Smp ID: SED-035-SIV-SDMS
Inj Date : 02-JUN-2011 15:15
Operator : WBR Inst ID: 2860_2.i
Smp Info : 200-5311-A-1-A
Misc Info : 200-5311-A-1-A
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

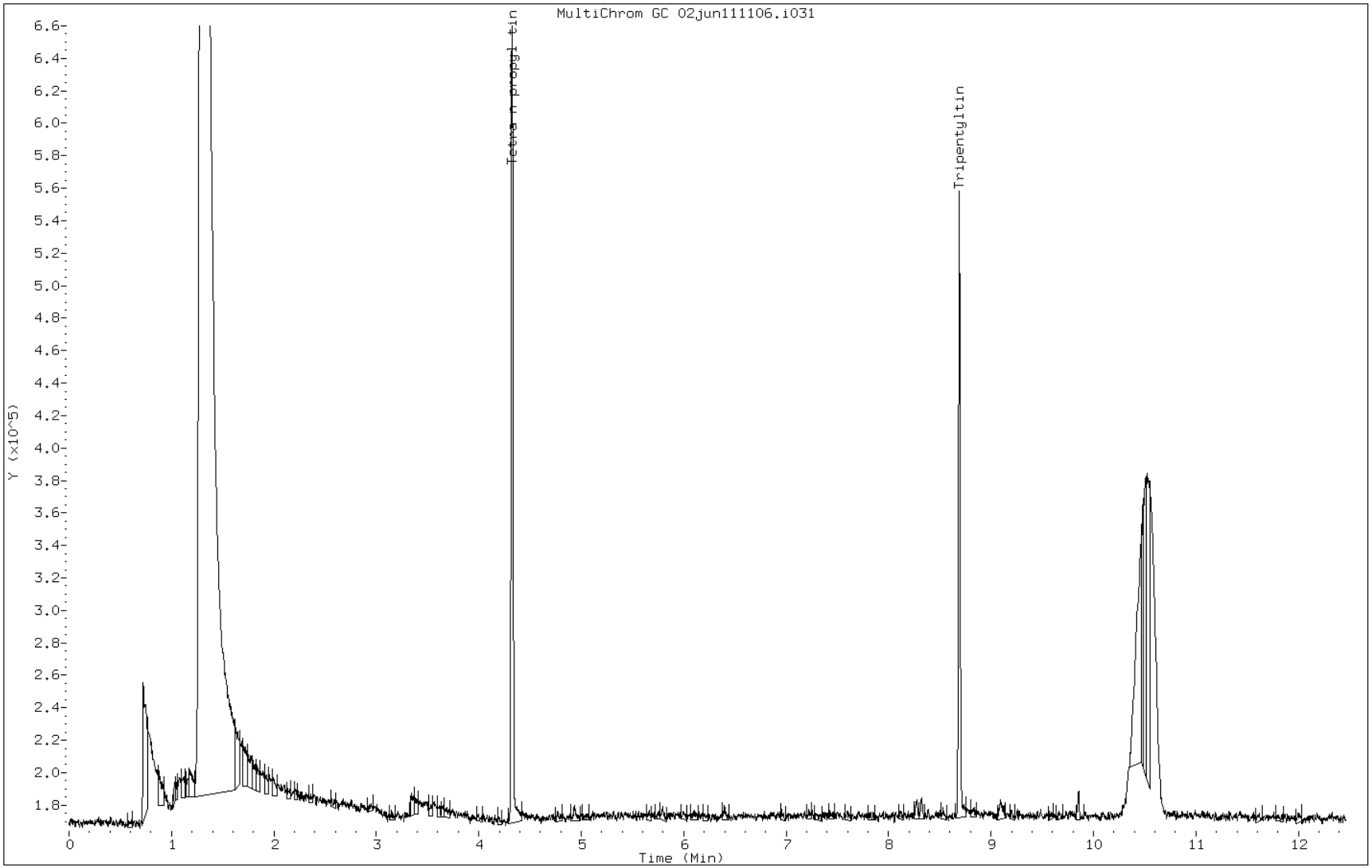
Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
*	1 Tetra-n-propyl tin				CAS #: 2176-98-9
	4.325	4.300 (1.000)	674965	500.000	
$	5 Tripentyltin				CAS #: 3342-67-4
	8.692	8.683 (2.010)	462531	410.149	410.1

Data File:	02jun111106-r031.d	Date:	02-JUN-2011 15:15
Client ID:	SED-035-SIV-SDMS	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	200-5311-A-1-A		
Lab Sample ID:	200-5311-1		



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: DUP03-SIV-QC-052311 | Lab Sample ID: 200-5311-2

Matrix: Solid | Lab File ID: 02jun111106-r051.d

Analysis Method: Organotins/GC | Date Collected: 05/23/2011 15:10

Extraction Method: 3550B | Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.78(g) | Date Analyzed: 06/02/2011 15:49

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1.5(uL) | GC Column: RTX-35 ID: 0.32(mm)

% Moisture: 45.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	3.1	U	3.1	0.79
688-73-3	Tributyltin	2.7	U	2.7	1.2
1002-53-5	Dibutyltin	2.3	U	2.3	0.72
2406-65-7	Monobutyltin	9.0	U J	9.0	9.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	95		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-2
Client Smp ID: DUP03-SIV-QC-052311
Inj Date : 02-JUN-2011 15:49
Operator : WBR Inst ID: 2860_1.i
Smp Info : 200-5311-A-2-A
Misc Info : 200-5311-A-2-A
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

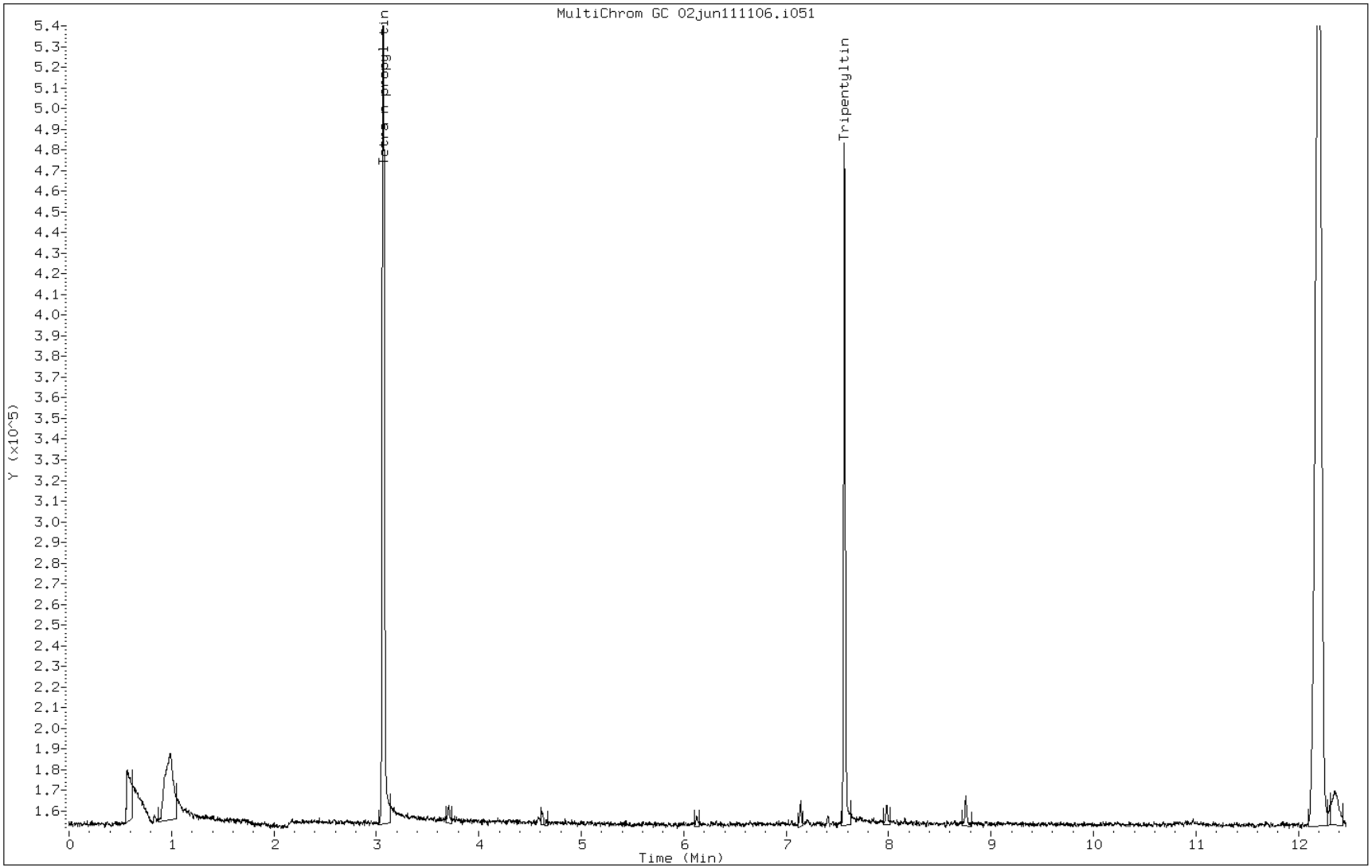
Cpnd Variable Local Compound Variable

RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9	
3.068	3.017 (0.000)	703744	500.000		(M)
$ 5 Tripentyltin				CAS #: 3342-67-4	
7.570	7.554 (1.000)	407373	428.831	428.8	

QC Flag Legend

M - Compound response manually integrated.

Data File:	02jun111106-r051.d	Date:	02-JUN-2011 15:49
Client ID:	DUP03-SIV-QC-052311	Instrument:	2860_1.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-35		
Sample Info:	200-5311-A-2-A		
Lab Sample ID:	200-5311-2		



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: DUP03-SIV-QC-052311 | Lab Sample ID: 200-5311-2

Matrix: Solid | Lab File ID: 02jun111106-r051.d

Analysis Method: Organotins/GC | Date Collected: 05/23/2011 15:10

Extraction Method: 3550B | Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.78(g) | Date Analyzed: 06/02/2011 15:49

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1.5(uL) | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: 45.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	90		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-2
Client Smp ID: DUP03-SIV-QC-052311
Inj Date : 02-JUN-2011 15:49
Operator : WBR Inst ID: 2860_2.i
Smp Info : 200-5311-A-2-A
Misc Info : 200-5311-A-2-A
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

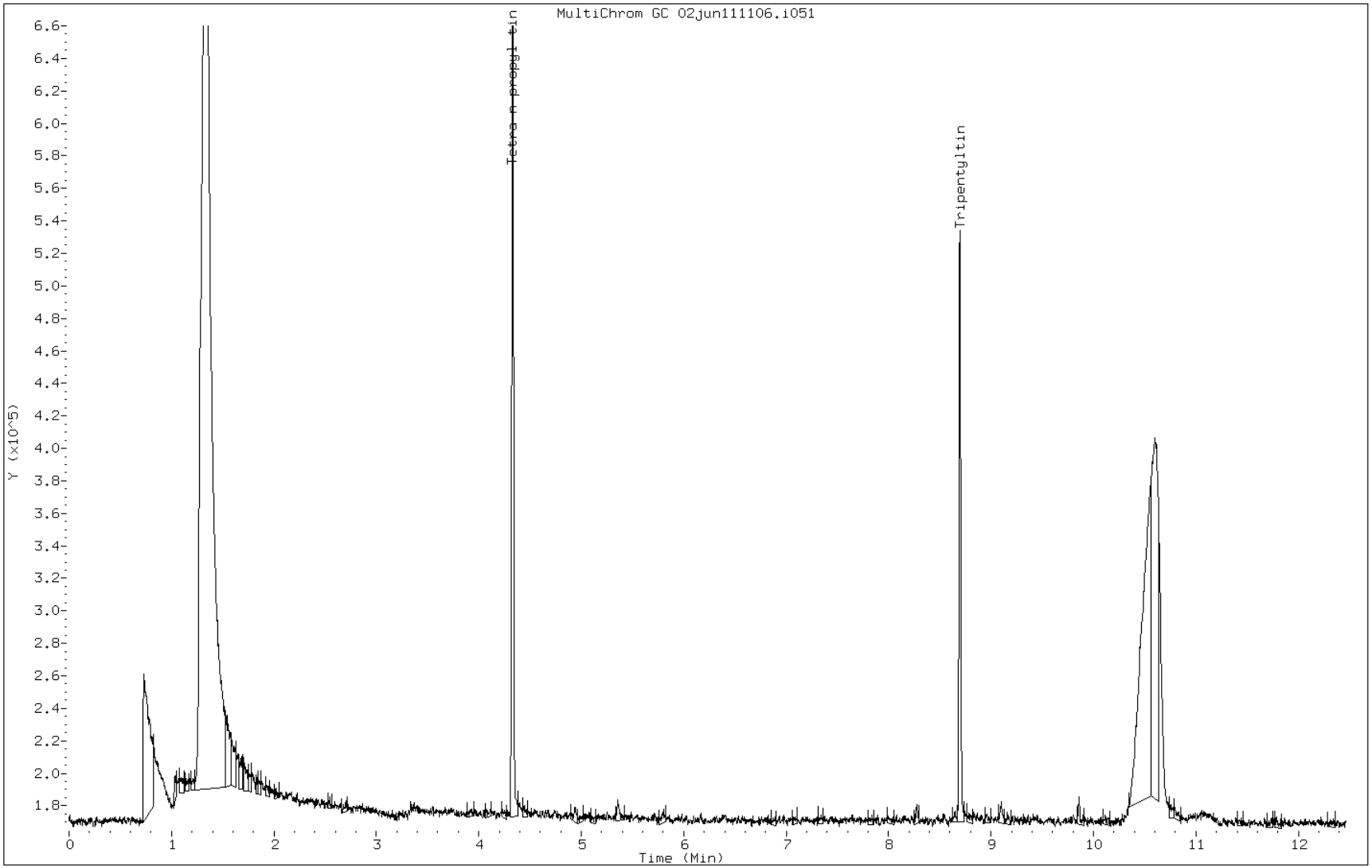
Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
*	1 Tetra-n-propyl tin				CAS #: 2176-98-9
	4.329	4.300 (1.000)	637681	500.000	
$	5 Tripentyltin				CAS #: 3342-67-4
	8.696	8.683 (2.009)	429763	403.373	403.4

Data File:	02jun111106-r051.d	Date:	02-JUN-2011 15:49
Client ID:	DUP03-SIV-QC-052311	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	200-5311-A-2-A		
Lab Sample ID:	200-5311-2		



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: FB08-SIV-052311 | Lab Sample ID: 200-5311-3

Matrix: Water | Lab File ID: 02jun111106-r101.d

Analysis Method: Organotins/GC | Date Collected: 05/23/2011 16:00

Extraction Method: 3510C | Date Extracted: 05/26/2011 20:40

Sample wt/vol: 1040(mL) | Date Analyzed: 06/02/2011 17:13

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1.5(uL) | GC Column: RTX-35 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	0.048	U	0.048	0.012
688-73-3	Tributyltin	0.043	U	0.043	0.012
1002-53-5	Dibutyltin	0.038	U	0.038	0.0081
2406-65-7	Monobutyltin	0.48	U J *	0.48	0.48

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	91		15-150

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-3
Client Smp ID: FB07-SIV-SS-052311
Inj Date : 02-JUN-2011 17:13
Operator : WBR Inst ID: 2860_1.i
Smp Info : 200-5311-A-3-A
Misc Info : 200-5311-A-3-A
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

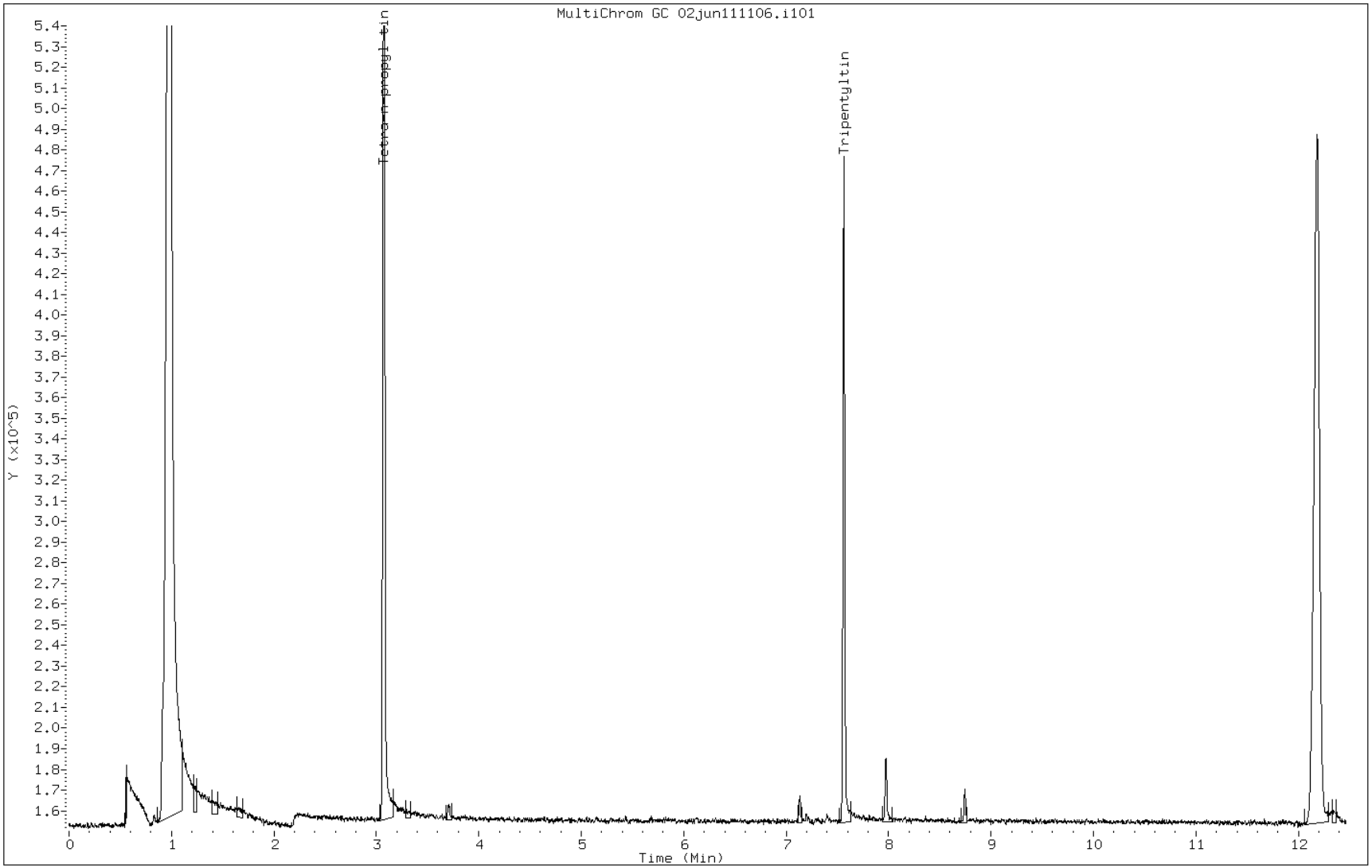
Cpnd Variable Local Compound Variable

			CONCENTRATIONS ON-COL	FINAL	
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)	
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9	
3.072	3.017 (0.000)	738870	500.000		(M)
$ 5 Tripentyltin				CAS #: 3342-67-4	
7.563	7.554 (1.000)	407113	408.184	408.2	

QC Flag Legend

M - Compound response manually integrated.

Data File:	02jun111106-r101.d	Date:	02-JUN-2011 17:13
Client ID:	FB07-SIV-SS-052311	Instrument:	2860_1.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-35		
Sample Info:	200-5311-A-3-A		
Lab Sample ID:	200-5311-3		



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: FB08-SIV-052311 Lab Sample ID: 200-5311-3

Matrix: Water Lab File ID: 02jun111106-r101.d

Analysis Method: Organotins/GC Date Collected: 05/23/2011 16:00

Extraction Method: 3510C Date Extracted: 05/26/2011 20:40

Sample wt/vol: 1040(mL) Date Analyzed: 06/02/2011 17:13

Con. Extract Vol.: 1000(uL) Dilution Factor: 1

Injection Volume: 1.5(uL) GC Column: RTX-5 ID: 0.32(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	88		15-150

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-3
Client Smp ID: FB07-SIV-SS-052311
Inj Date : 02-JUN-2011 17:13
Operator : WBR Inst ID: 2860_2.i
Smp Info : 200-5311-A-3-A
Misc Info : 200-5311-A-3-A
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

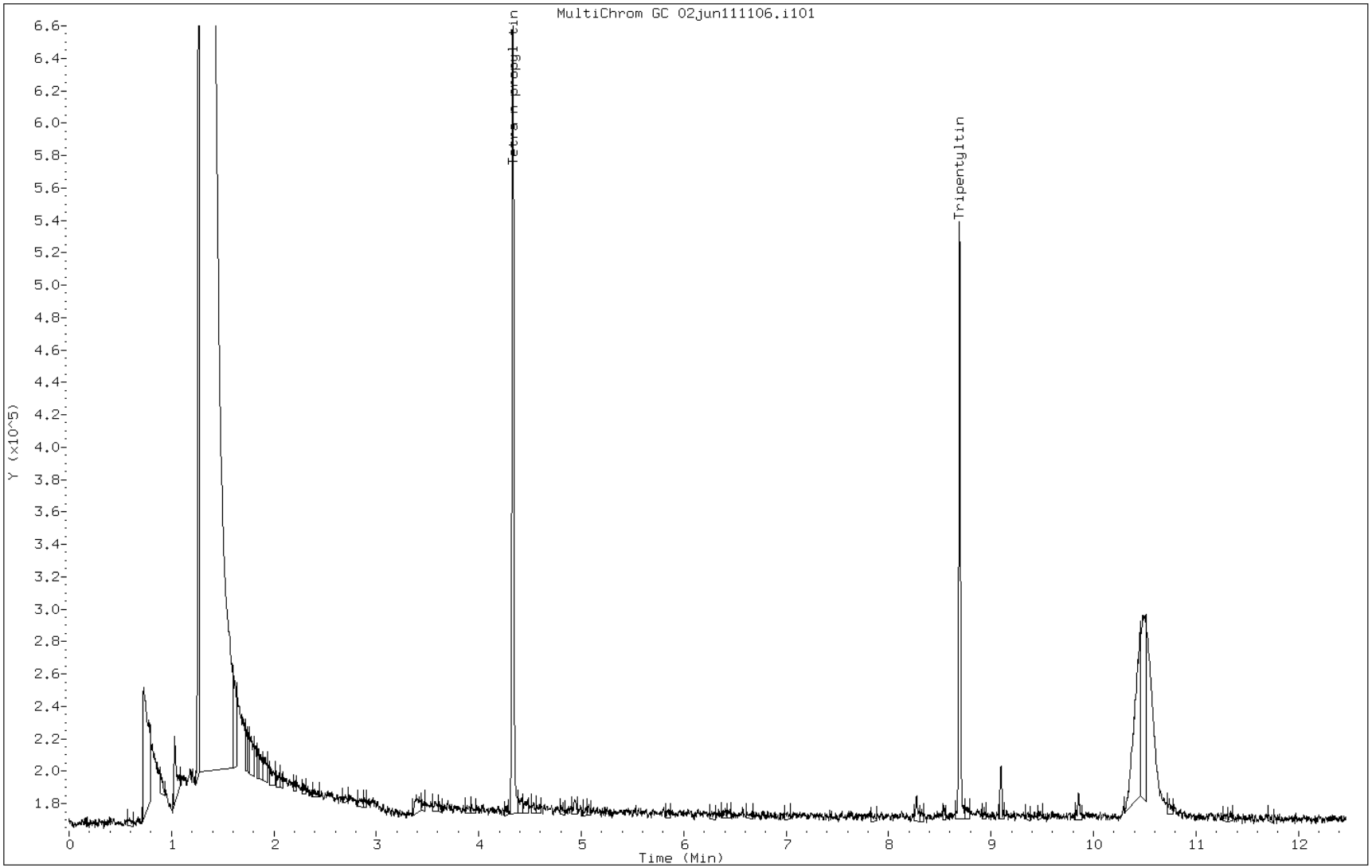
Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

			CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
RT	EXP RT (REL RT)	RESPONSE		
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
4.334	4.300 (1.000)	655379	500.000	
$ 5 Tripentyltin				CAS #: 3342-67-4
8.694	8.683 (2.006)	433640	396.021	396.0

Data File:	02jun111106-r101.d	Date:	02-JUN-2011 17:13
Client ID:	FB07-SIV-SS-052311	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	200-5311-A-3-A		
Lab Sample ID:	200-5311-3		



FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Burlington Job No.: 200-5311-1 Analy Batch No.: 19102

SDG No.: 5311

Instrument ID: 2860.i GC Column: RTX-35 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2011 12:42 Calibration End Date: 06/02/2011 13:50 Calibration ID: 7089

Calibration Files:

LEVEL:	LAB SAMPLE ID:	EPA SAMPLE NO:	LAB FILE ID:
Level 1	IC 200-19102/1	50 PPB	02jun110958-r031.d
Level 2	IC 200-19102/2	100 PPB	02jun110958-r041.d
Level 3	ICRT 200-19102/3	250 PPB	02jun110958-r051.d
Level 4	IC 200-19102/4	500 PPB	02jun110958-r061.d
Level 5	IC 200-19102/5	1000 PPB	02jun110958-r071.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrabutyltin	0.6915	0.7116	0.7651	0.6826	0.6565	Ave		0.7015				5.8		20.0			
Tributyltin	0.9906	0.8844	0.9799	0.8431	0.8432	Ave		0.9082				8.0		20.0			
Dibutyltin	1.1675	1.1950	1.1692	1.0501	1.0111	Ave		1.1186				7.4		20.0			
Monobutyltin	0.9592	0.9641	1.1374	0.9628	0.9670	Ave		0.9981				7.8		20.0			
Tripentyltin	0.7116	0.6792	0.7436	0.6045	0.6357	Ave		0.6749				8.3		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-5311-1 Analy Batch No.: 19102

SDG No.: 5311

Instrument ID: 2860.i GC Column: RTX-35 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2011 12:42 Calibration End Date: 06/02/2011 13:50 Calibration ID: 7089

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-19102/1	02jun110958-r031.d
Level 2	IC 200-19102/2	02jun110958-r041.d
Level 3	ICRT 200-19102/3	02jun110958-r051.d
Level 4	IC 200-19102/4	02jun110958-r061.d
Level 5	IC 200-19102/5	02jun110958-r071.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Tetrabutyltin	TPT	Ave	46966	97831	248599	457265	896912	50.0	100	250	500	1000
Tributyltin	TPT	Ave	59879	108207	283983	502686	1025234	44.5	89.0	223	445	890
Dibutyltin	TPT	Ave	61061	126507	293260	541653	1063615	38.5	77.0	193	385	770
Monobutyltin	TPT	Ave	40394	82181	229125	399897	819077	31.0	62.0	155	310	620
Tripentyltin	TPT	Ave	43499	84044	217441	364484	781597	45.0	90.0	225	450	900

Curve Type Legend:
Ave = Average ISTD

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN110958.b/02jun110958-r031.d
Lab Smp Id: IC-131787 Client Smp ID: 50 PPB
Inj Date : 02-JUN-2011 12:42
Operator : WBR Inst ID: 2860_1.i
Smp Info : IC-131787,1,50 PPB
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN110958.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:48 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 12:42 Cal File: 02jun110958-r031.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

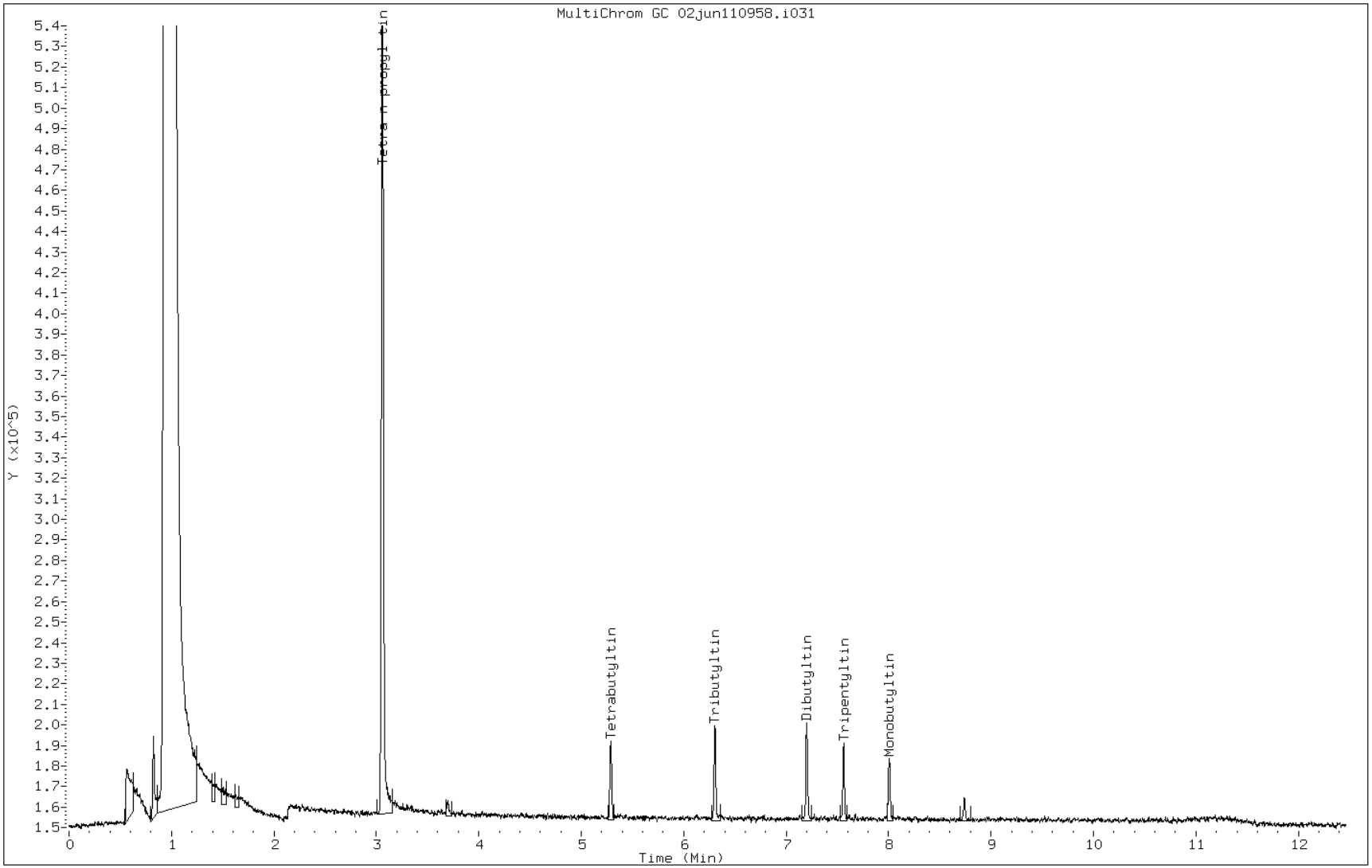
	RT	EXP RT (REL RT)	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
*	1 Tetra-n-propyl tin				CAS #: 2176-98-9	
	3.059	3.017 (1.000)	679214	500.000		
	2 Tetrabutyltin				CAS #: 1461-25-2	
	5.287	5.276 (1.728)	46966	50.0000	49.29	(a)
	3 Tributyltin				CAS #: 688-73-3	
	6.304	6.295 (2.061)	59879	44.5000	48.53	
	4 Dibutyltin				CAS #: 1002-53-5	
	7.200	7.191 (2.354)	61061	38.5000	40.18	
$	5 Tripentyltin				CAS #: 3342-67-4	
	7.561	7.554 (2.472)	43499	45.0000	47.44	

			AMOUNTS	
			CAL-AMT	ON-COL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	====== ========	========	=======	=======
6 Monobutyltin				CAS #: 2406-65-7
8.004	7.996 (2.617)	40394	31.0000	29.79 (a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File:	02jun110958-r031.d	Date:	02-JUN-2011 12:42
Client ID:	50 PPB	Instrument:	2860_1.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-35		
Sample Info:	IC-131787,1,50 PPB		
Lab Sample ID:	IC-131787		



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN110958.b/02jun110958-r041.d
Lab Smp Id: IC-131788 Client Smp ID: 100 PPB
Inj Date : 02-JUN-2011 12:59
Operator : WBR Inst ID: 2860_1.i
Smp Info : IC-131788,1,100 PPB
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN110958.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:48 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 12:59 Cal File: 02jun110958-r041.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

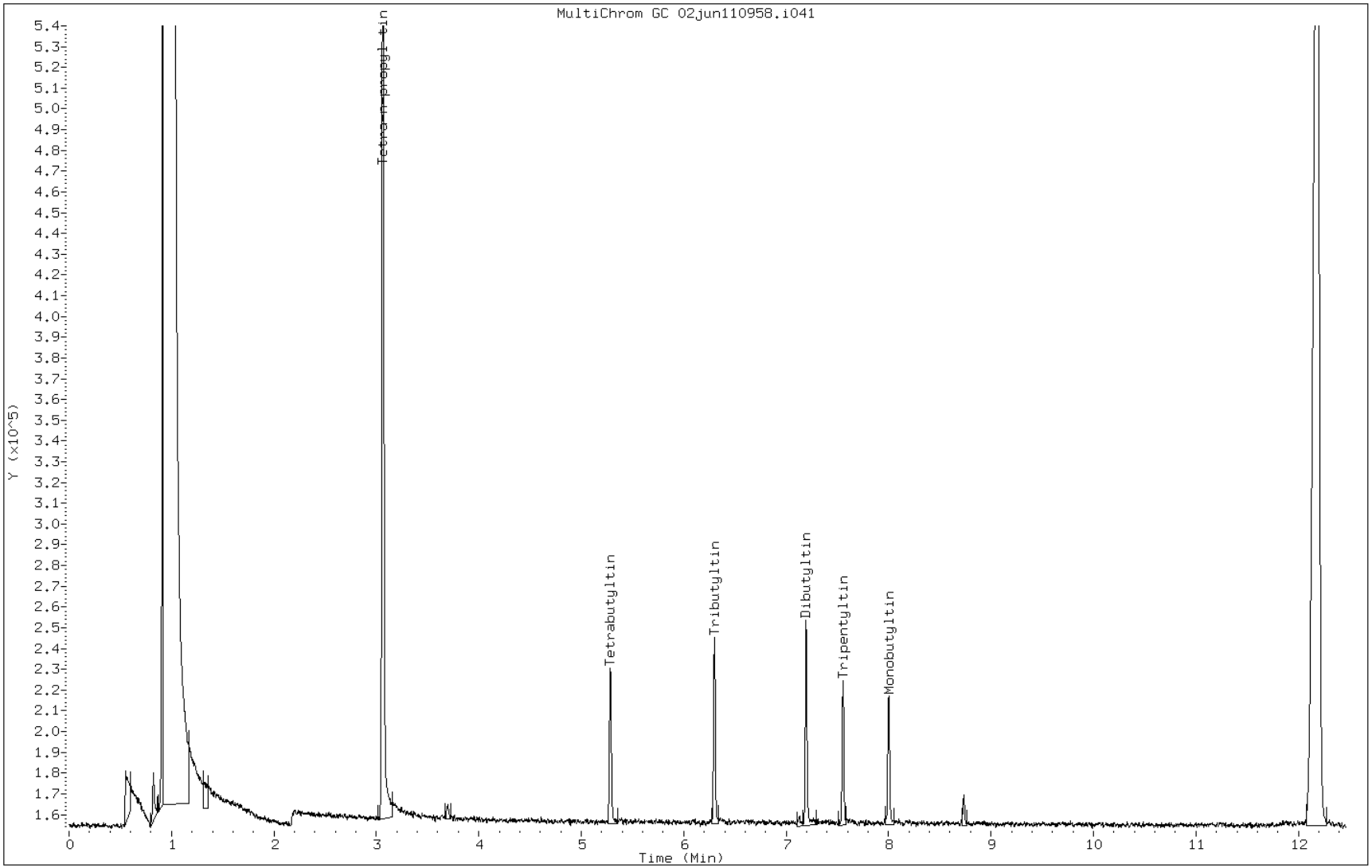
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

			AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
RT	EXP RT (REL RT)	RESPONSE		
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
3.063	3.017 (1.000)	687400	500.000	
2 Tetrabutyltin				CAS #: 1461-25-2
5.285	5.276 (1.725)	97831	100.000	101.4
3 Tributyltin				CAS #: 688-73-3
6.300	6.295 (2.056)	108207	89.0000	86.66
4 Dibutyltin				CAS #: 1002-53-5
7.195	7.191 (2.349)	126507	77.0000	82.26
$ 5 Tripentyltin				CAS #: 3342-67-4
7.554	7.554 (2.466)	84044	90.0000	90.57

			AMOUNTS	
			CAL-AMT	ON-COL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	====== ========	========	=======	=======
6 Monobutyltin				CAS #: 2406-65-7
8.002	7.996 (2.612)	82181	62.0000	59.89

Data File:	02jun110958-r041.d	Date:	02-JUN-2011 12:59
Client ID:	100 PPB	Instrument:	2860_1.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-35		
Sample Info:	IC-131788,1,100 PPB		
Lab Sample ID:	IC-131788		



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN110958.b/02jun110958-r051.d
Lab Smp Id: ICRT-131789 Client Smp ID: 250 PPB
Inj Date : 02-JUN-2011 13:16
Operator : WBR Inst ID: 2860_1.i
Smp Info : ICRT-131789,1,250 PPB
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN110958.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:48 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:16 Cal File: 02jun110958-r051.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

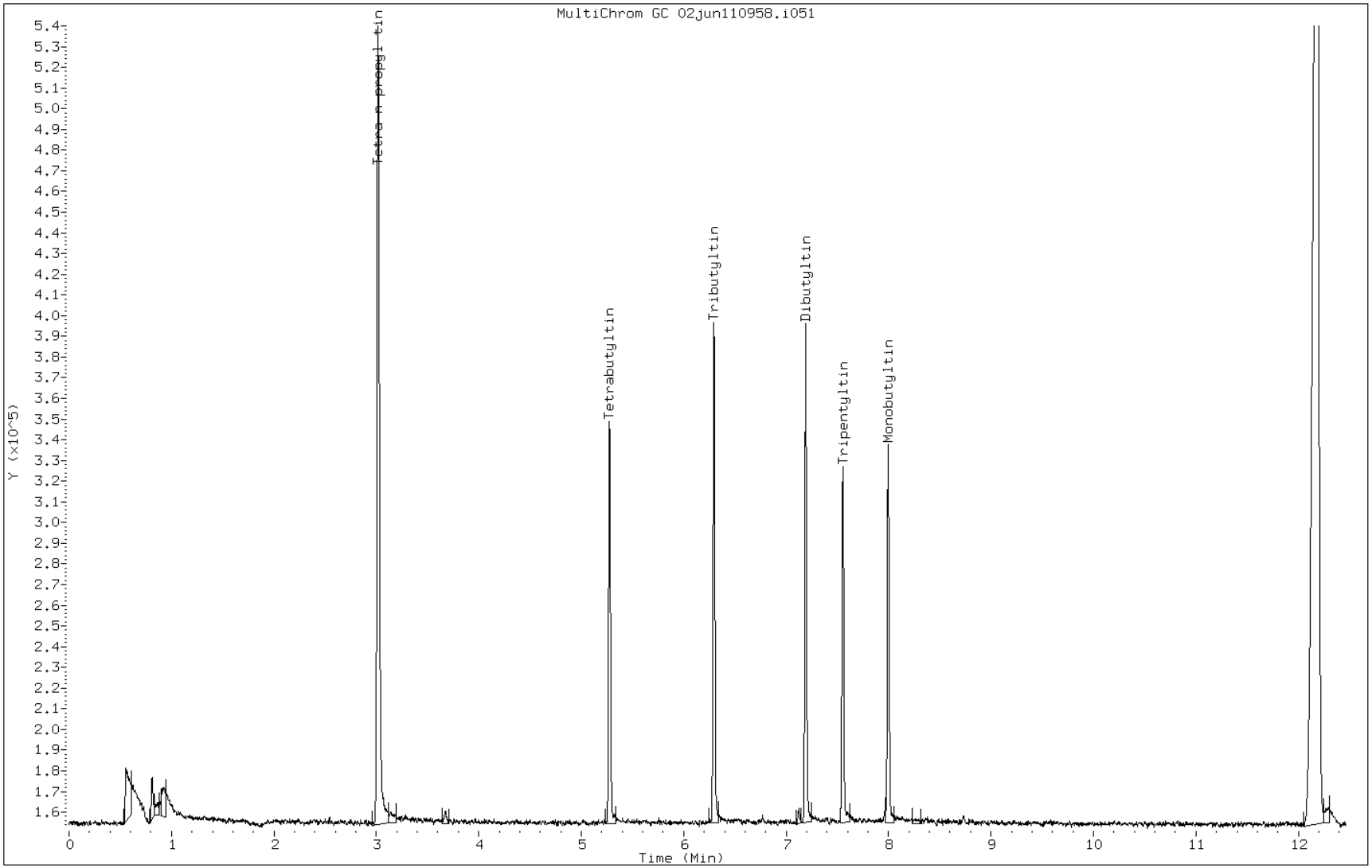
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
*	1 Tetra-n-propyl tin					CAS #: 2176-98-9
	3.017	3.017 (1.000)	649807	500.000		
	2 Tetrabutyltin					CAS #: 1461-25-2
	5.276	5.276 (1.749)	248599	250.000	272.7	
	3 Tributyltin					CAS #: 688-73-3
	6.295	6.295 (2.087)	283983	223.000	240.6	
	4 Dibutyltin					CAS #: 1002-53-5
	7.191	7.191 (2.384)	293260	193.000	201.7	
$	5 Tripentyltin					CAS #: 3342-67-4
	7.554	7.554 (2.504)	217441	225.000	247.9	

			AMOUNTS	
			CAL-AMT	ON-COL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	====== ========	========	=======	=======
6 Monobutyltin				CAS #: 2406-65-7
7.996	7.996 (2.650)	229125	155.000	176.6

Data File:	02jun110958-r051.d	Date:	02-JUN-2011 13:16
Client ID:	250 PPB	Instrument:	2860_1.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-35		
Sample Info:	ICRT-131789,1,250 PPB		
Lab Sample ID:	ICRT-131789		



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN110958.b/02jun110958-r061.d
Lab Smp Id: IC-131790 Client Smp ID: 500 PPB
Inj Date : 02-JUN-2011 13:33
Operator : WBR Inst ID: 2860_1.i
Smp Info : IC-131790,1,500 PPB
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN110958.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:48 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:33 Cal File: 02jun110958-r061.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

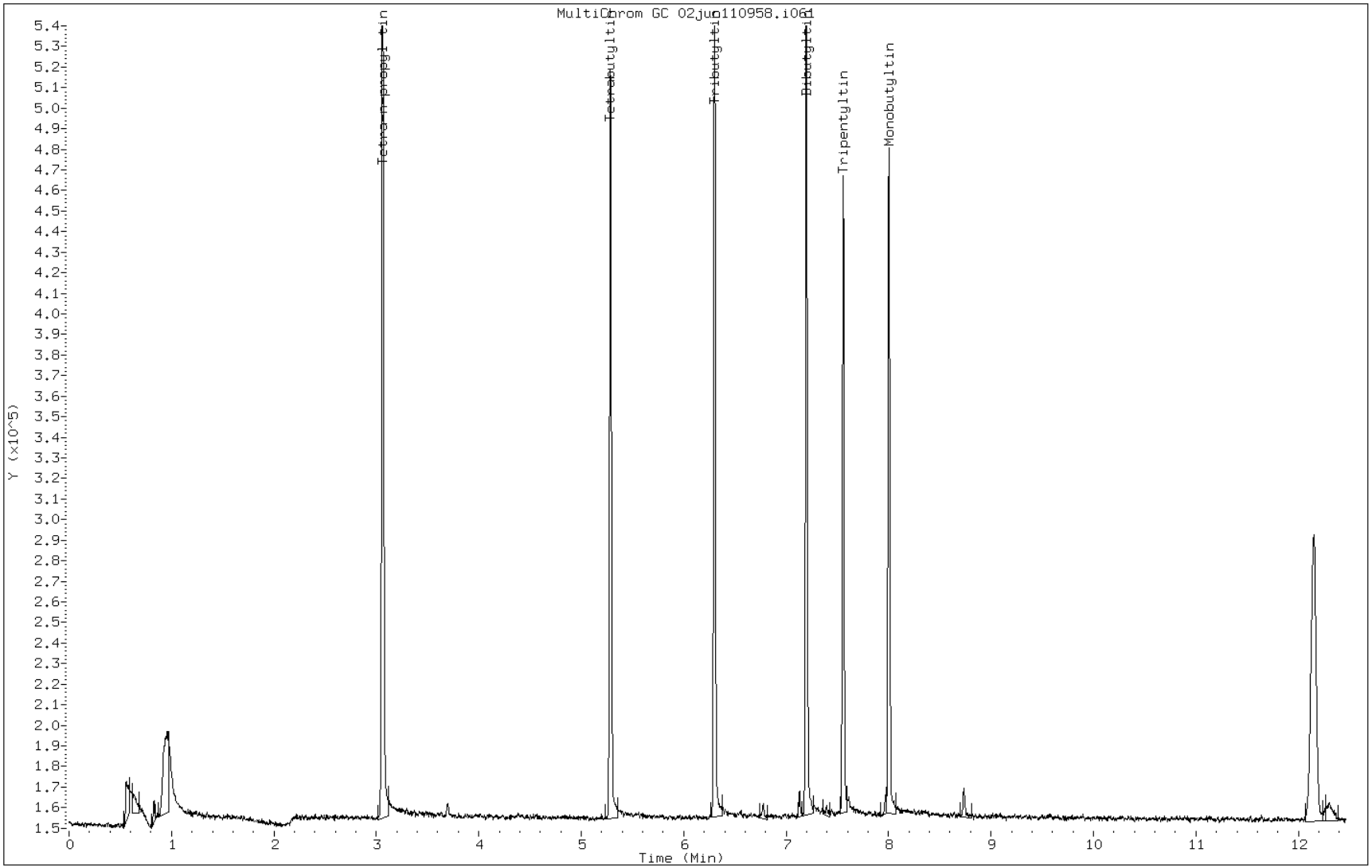
Cpnd Variable Local Compound Variable

		RT	EXP RT (REL RT)	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
*	1 Tetra-n-propyl tin						CAS #: 2176-98-9
		3.061	3.017 (1.000)	669893	500.000		
	2 Tetrabutyltin						CAS #: 1461-25-2
		5.285	5.276 (1.726)	457265	500.000	486.5	
	3 Tributyltin						CAS #: 688-73-3
		6.300	6.295 (2.058)	502686	445.000	413.1	
	4 Dibutyltin						CAS #: 1002-53-5
		7.198	7.191 (2.351)	541653	385.000	361.4	
$	5 Tripentyltin						CAS #: 3342-67-4
		7.557	7.554 (2.469)	364484	450.000	403.1	

			AMOUNTS	
			CAL-AMT	ON-COL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	====== ========	========	=======	=======
6 Monobutyltin				CAS #: 2406-65-7
8.004	7.996 (2.615)	399897	310.000	299.0

Data File: 02jun110958-r061.d
Client ID: 500 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: IC-131790,1,500 PPB
Lab Sample ID: IC-131790

Date: 02-JUN-2011 13:33
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN110958.b/02jun110958-r071.d
Lab Smp Id: IC-131791 Client Smp ID: 1000 PPB
Inj Date : 02-JUN-2011 13:50
Operator : WBR Inst ID: 2860_1.i
Smp Info : IC-131791,1,1000 PPB
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN110958.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:48 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

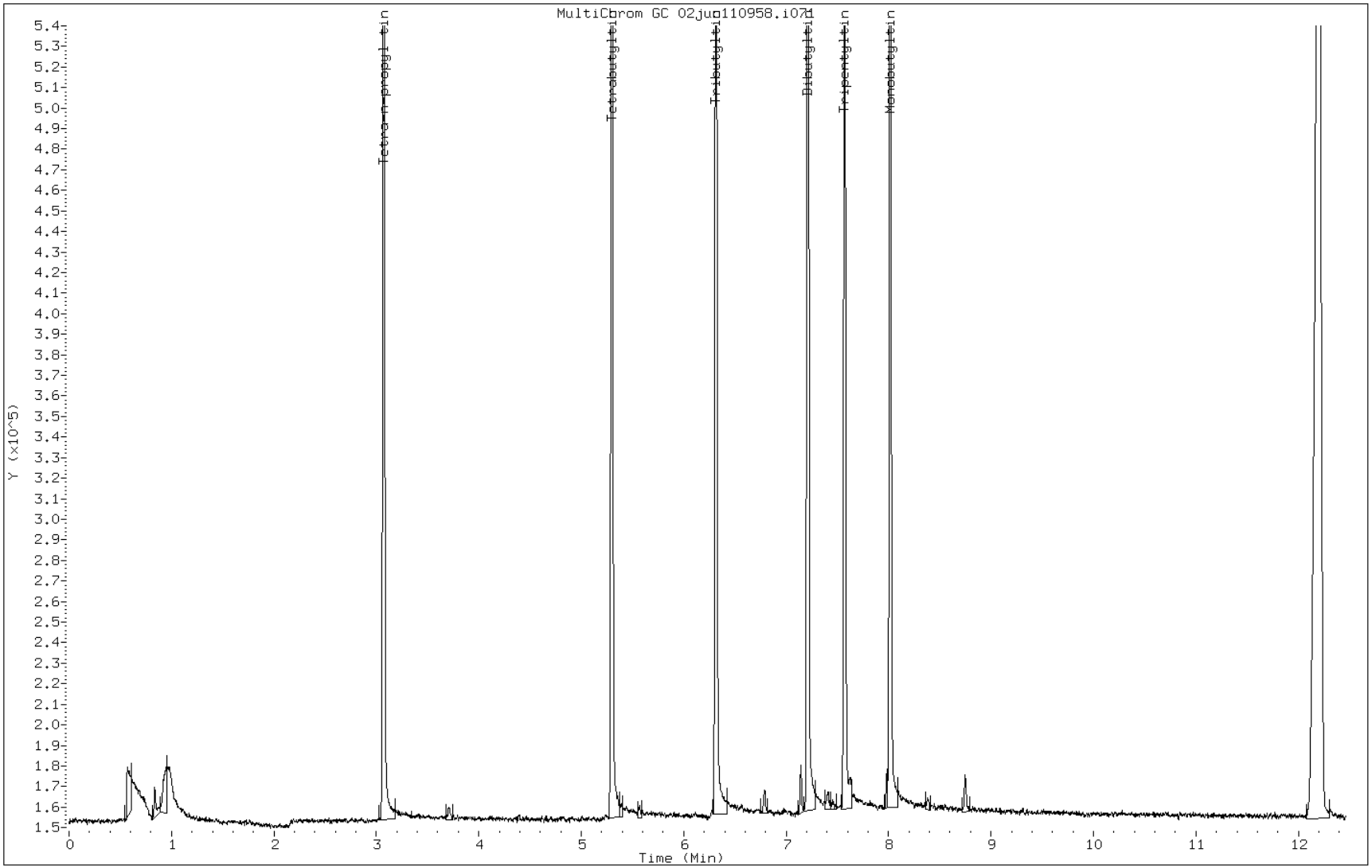
		RT	EXP RT (REL RT)	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
*	1 Tetra-n-propyl tin					CAS #: 2176-98-9	
		3.072	3.017 (0.000)	683080	500.000		(M)
	2 Tetrabutyltin					CAS #: 1461-25-2	
		5.298	5.276 (1.000)	896912	1000.00	935.9	
	3 Tributyltin					CAS #: 688-73-3	
		6.315	6.295 (1.000)	1025234	890.000	826.3	
	4 Dibutyltin					CAS #: 1002-53-5	
		7.211	7.191 (1.000)	1063615	770.000	696.0	
$	5 Tripentyltin					CAS #: 3342-67-4	
		7.570	7.554 (1.000)	781597	900.000	847.7	

			AMOUNTS		
			CAL-AMT	ON-COL	
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)	
6 Monobutyltin				CAS #: 2406-65-7	
8.015	7.996 (1.000)	819077	620.000	600.7	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File:	02jun110958-r071.d	Date:	02-JUN-2011 13:50
Client ID:	1000 PPB	Instrument:	2860_1.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-35		
Sample Info:	IC-131791,1,1000 PPB		
Lab Sample ID:	IC-131791		

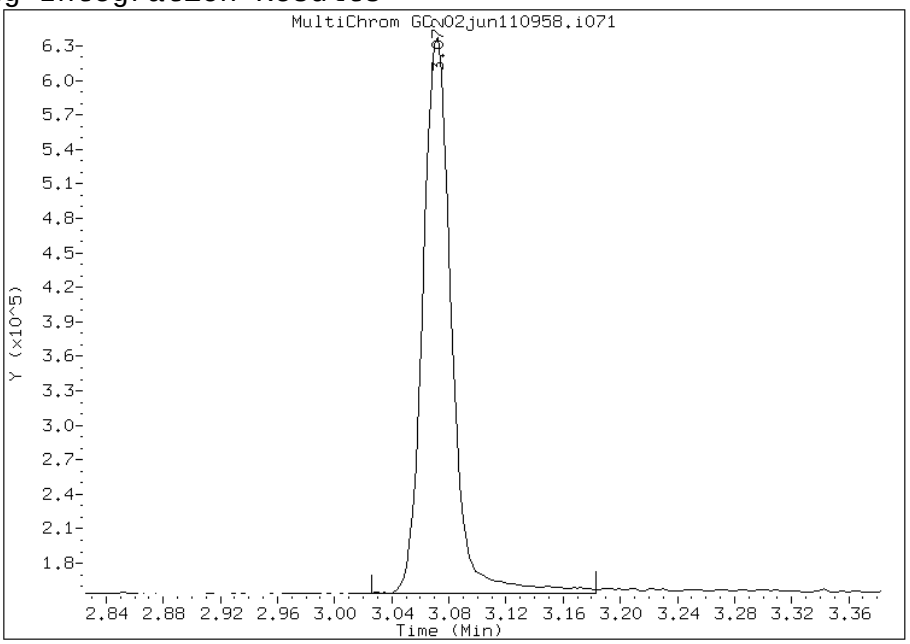


Manual Integration Report

Data File: 02jun110958-r071.d
Lab Sample ID: IC-131791
Inj. Date and Time: 02-JUN-2011 13:50
Instrument ID: 2860_1.i
Client ID: 1000 PPB
Compound: 1 Tetra-n-propyl tin
CAS #: 2176-98-9
Report Date: 06/06/2011

Processing Integration Results

Not Detected



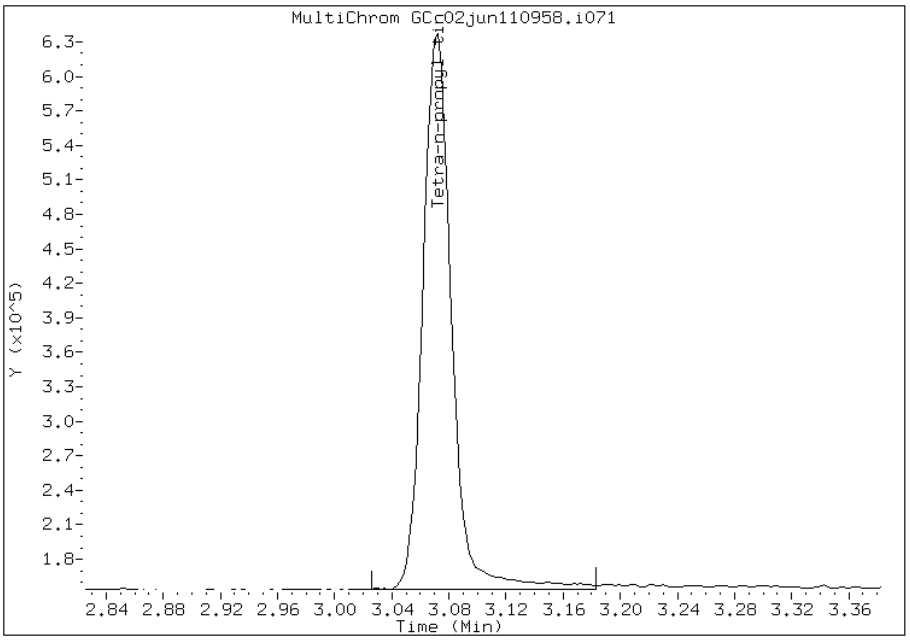
Manual Integration Results

RT: 3.07

Response: 683080

Amount: 500.00

Conc: 500.00



File Uploaded By: wbr
Manual Integration Reason: Peak not found by the data system

Manual Integration Report

Data File: 02jun110958-r071.d
Lab Sample ID: IC-131791
Inj. Date and Time: 02-JUN-2011 13:50
Instrument ID: 2860_1.i
Client ID: 1000 PPB
Compound: 6 Monobutyltin
CAS #: 2406-65-7
Report Date: 06/06/2011

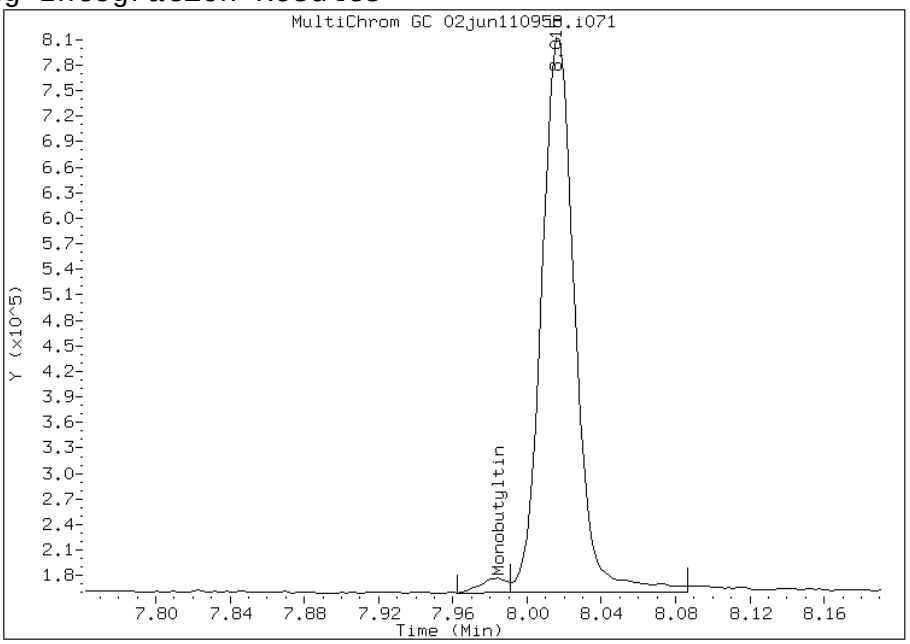
Processing Integration Results

RT: 7.98

Response: 17269

Amount: 0.000000

Conc: 0.000000



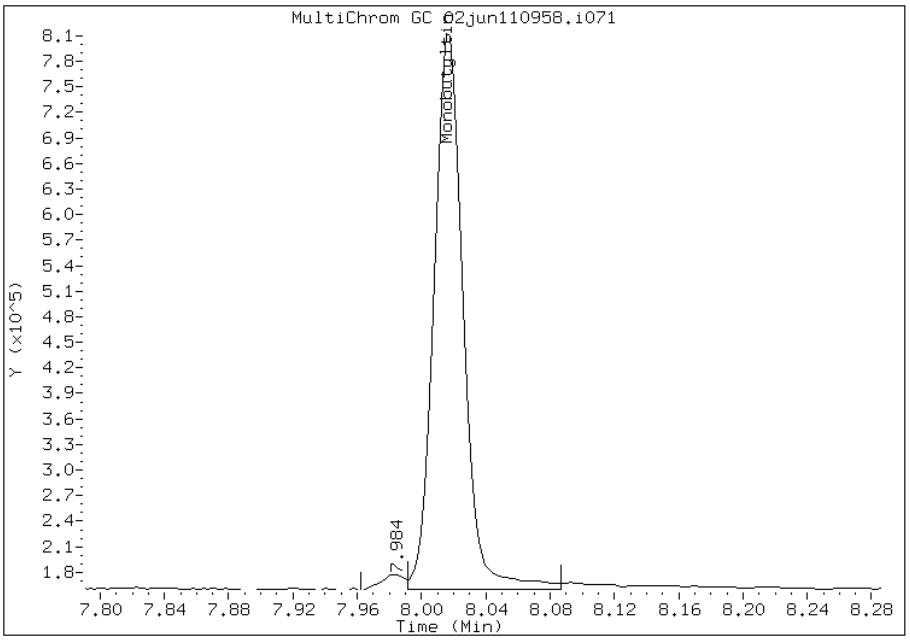
Manual Integration Results

RT: 8.02

Response: 819077

Amount: 600.67

Conc: 600.70



File Uploaded By: wbr
Manual Integration Reason: Analyte misidentified by the data system

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUTION

Lab Name: TestAmerica Burlington Job No.: 200-5311-1 Analy Batch No.: 19102

SDG No.: 5311

Instrument ID: 2860.i GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2011 12:42 Calibration End Date: 06/02/2011 13:50 Calibration ID: 7090

Calibration Files:

LEVEL:	LAB SAMPLE ID:	EPA SAMPLE NO:	LAB FILE ID:
Level 1	IC 200-19102/1	50 PPB	02jun110958-r031.d
Level 2	IC 200-19102/2	100 PPB	02jun110958-r041.d
Level 3	ICRT 200-19102/3	250 PPB	02jun110958-r051.d
Level 4	IC 200-19102/4	500 PPB	02jun110958-r061.d
Level 5	IC 200-19102/5	1000 PPB	02jun110958-r071.d

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrabutyltin	0.9303	0.7912	0.7031	0.6841	0.6678	Ave		0.7553				14.4		20.0			
Tributyltin	1.1226	1.0552	0.9361	0.8999	0.8555	Ave		0.9739				11.4		20.0			
Dibutyltin	1.2172	1.3212	1.1095	1.0959	1.0334	Ave		1.1554				9.9		20.0			
Monobutyltin	1.2526	1.1988	1.2231	1.1480	1.1904	Ave		1.2026				3.2		20.0			
Tripentyltin	0.9322	0.8587	0.8600	0.7623	0.7639	Ave		0.8354				8.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Burlington Job No.: 200-5311-1 Analy Batch No.: 19102

SDG No.: 5311

Instrument ID: 2860.i GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/02/2011 12:42 Calibration End Date: 06/02/2011 13:50 Calibration ID: 7090

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 200-19102/1	02jun110958-r031.d
Level 2	IC 200-19102/2	02jun110958-r041.d
Level 3	ICRT 200-19102/3	02jun110958-r051.d
Level 4	IC 200-19102/4	02jun110958-r061.d
Level 5	IC 200-19102/5	02jun110958-r071.d

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Tetrabutyltin	TPT	Ave	58318	93547	230088	422704	849402	50.0	100	250	500	1000
Tributyltin	TPT	Ave	62634	111035	273273	494869	968495	44.5	89.0	223	445	890
Dibutyltin	TPT	Ave	58752	120285	280302	521383	1012080	38.5	77.0	193	385	770
Monobutyltin	TPT	Ave	48684	87874	248166	439786	938748	31.0	62.0	155	310	620
Tripentyltin	TPT	Ave	52591	91372	253291	423892	874446	45.0	90.0	225	450	900

Curve Type Legend:
Ave = Average ISTD

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN110958.b/02jun110958-r031.d
Lab Smp Id: IC-131787 Client Smp ID: 50 PPB
Inj Date : 02-JUN-2011 12:42
Operator : WBR Inst ID: 2860_2.i
Smp Info : IC-131787,1,50 PPB
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN110958.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:36 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 12:42 Cal File: 02jun110958-r031.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

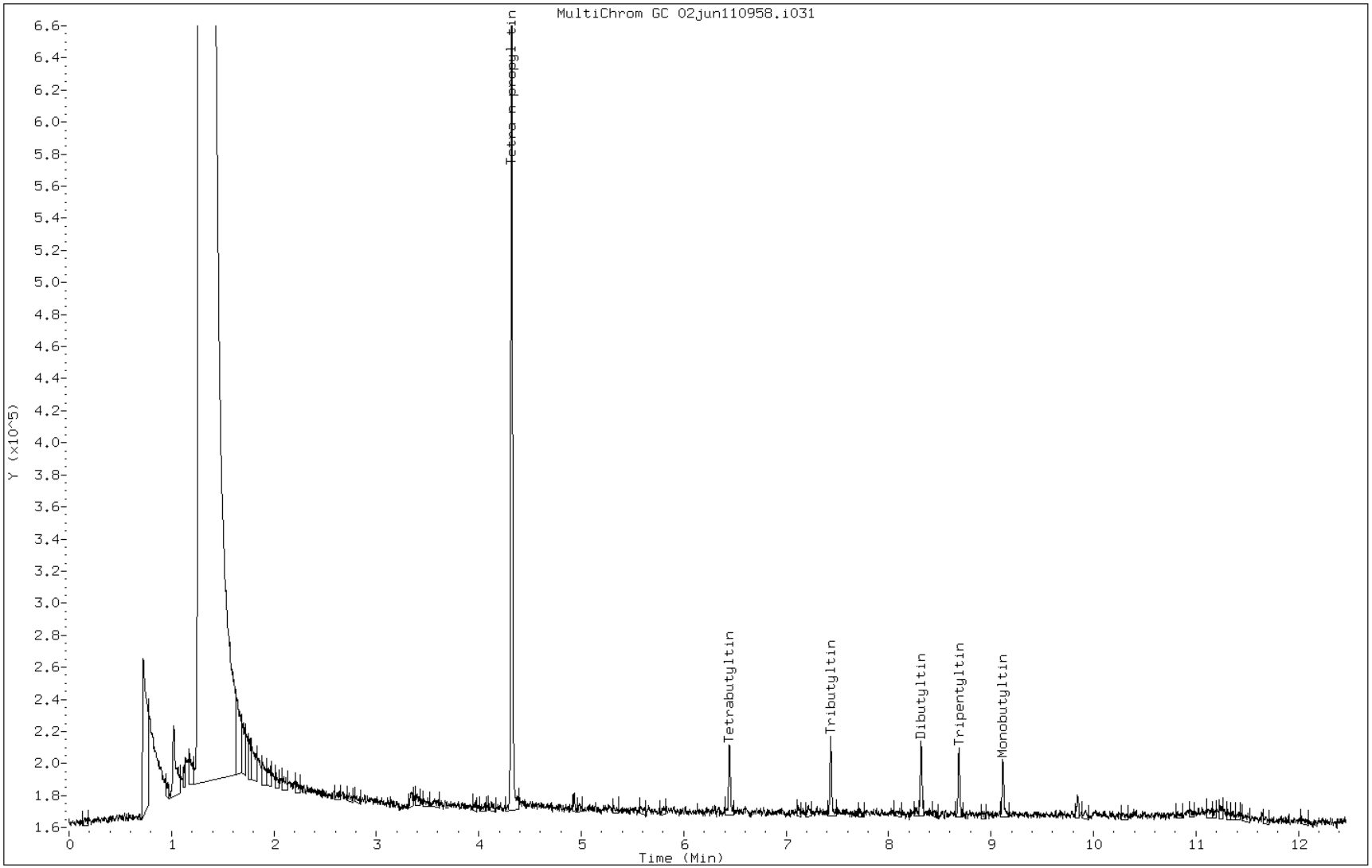
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
*	1 Tetra-n-propyl tin					CAS #: 2176-98-9
	4.320	4.300 (1.000)	626869	500.000		
	2 Tetrabutyltin					CAS #: 1461-25-2
	6.446	6.439 (1.492)	58318	50.0000	61.59	
	3 Tributyltin					CAS #: 688-73-3
	7.437	7.430 (1.721)	62634	44.5000	51.30	
	4 Dibutyltin					CAS #: 1002-53-5
	8.317	8.310 (1.925)	58752	38.5000	40.56	
$	5 Tripentyltin					CAS #: 3342-67-4
	8.687	8.683 (2.011)	52591	45.0000	50.21	

			AMOUNTS	
			CAL-AMT	ON-COL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	====== ========	========	=======	=======
6 Monobutyltin				CAS #: 2406-65-7
9.115	9.111 (2.110)	48684	31.0000	32.29

Data File:	02jun110958-r031.d	Date:	02-JUN-2011 12:42
Client ID:	50 PPB	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	IC-131787,1,50 PPB		
Lab Sample ID:	IC-131787		



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN110958.b/02jun110958-r041.d
Lab Smp Id: IC-131788 Client Smp ID: 100 PPB
Inj Date : 02-JUN-2011 12:59
Operator : WBR Inst ID: 2860_2.i
Smp Info : IC-131788,1,100 PPB
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN110958.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:36 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 12:59 Cal File: 02jun110958-r041.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

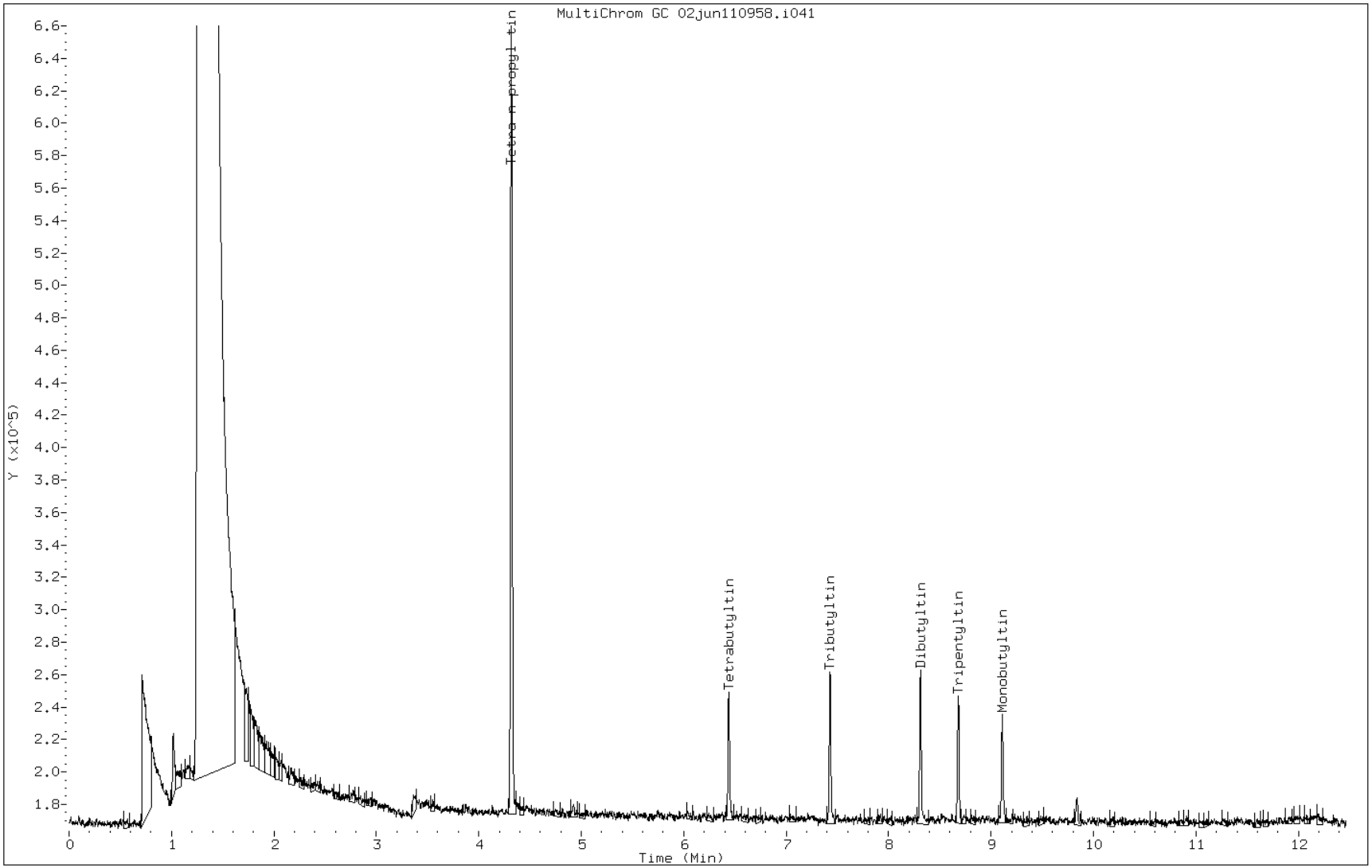
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
*	1 Tetra-n-propyl tin					CAS #: 2176-98-9
	4.318	4.300 (1.000)	591163	500.000		
	2 Tetrabutyltin					CAS #: 1461-25-2
	6.439	6.439 (1.491)	93547	100.000	104.8	
	3 Tributyltin					CAS #: 688-73-3
	7.428	7.430 (1.720)	111035	89.0000	96.43	
	4 Dibutyltin					CAS #: 1002-53-5
	8.310	8.310 (1.925)	120285	77.0000	88.05	
$	5 Tripentyltin					CAS #: 3342-67-4
	8.680	8.683 (2.010)	91372	90.0000	92.51	

			AMOUNTS	
			CAL-AMT	ON-COL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	====== ========	========	=======	=======
6 Monobutyltin				CAS #: 2406-65-7
9.111	9.111 (2.110)	87874	62.0000	61.80

Data File:	02jun110958-r041.d	Date:	02-JUN-2011 12:59
Client ID:	100 PPB	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	IC-131788,1,100 PPB		
Lab Sample ID:	IC-131788		



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN110958.b/02jun110958-r051.d
Lab Smp Id: ICRT-131789 Client Smp ID: 250 PPB
Inj Date : 02-JUN-2011 13:16
Operator : WBR Inst ID: 2860_2.i
Smp Info : ICRT-131789,1,250 PPB
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN110958.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:36 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:16 Cal File: 02jun110958-r051.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

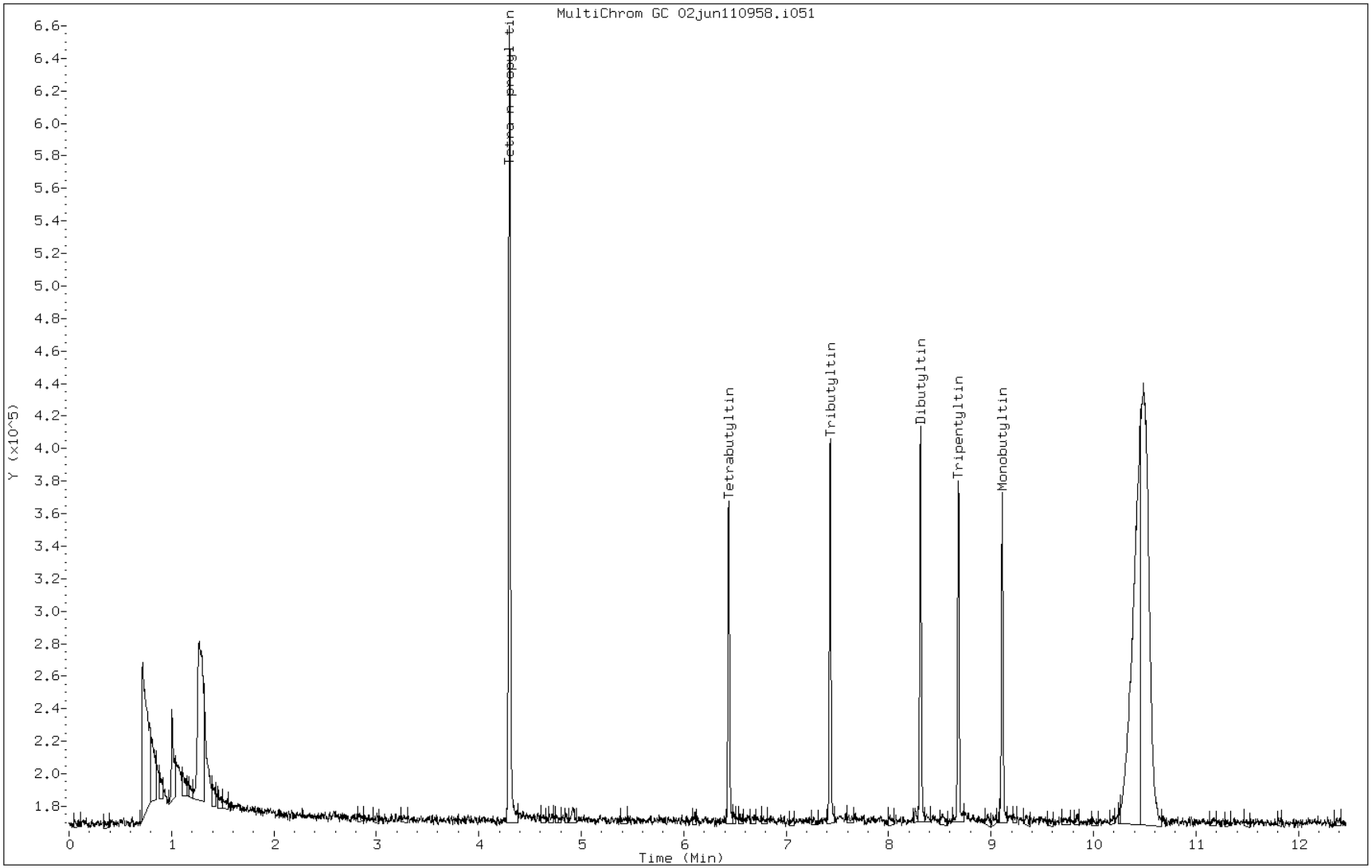
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
*	1 Tetra-n-propyl tin					CAS #: 2176-98-9
	4.300	4.300 (1.000)	654527	500.000		
	2 Tetrabutyltin					CAS #: 1461-25-2
	6.439	6.439 (1.497)	230088	250.000	232.7	
	3 Tributyltin					CAS #: 688-73-3
	7.430	7.430 (1.728)	273273	223.000	214.4	
	4 Dibutyltin					CAS #: 1002-53-5
	8.310	8.310 (1.932)	280302	193.000	185.3	
$	5 Tripentyltin					CAS #: 3342-67-4
	8.683	8.683 (2.019)	253291	225.000	231.6	

			AMOUNTS	
			CAL-AMT	ON-COL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	====== ========	========	=======	=======
6 Monobutyltin				CAS #: 2406-65-7
9.111	9.111 (2.119)	248166	155.000	157.6

Data File:	02jun110958-r051.d	Date:	02-JUN-2011 13:16
Client ID:	250 PPB	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	ICRT-131789,1,250 PPB		
Lab Sample ID:	ICRT-131789		



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN110958.b/02jun110958-r061.d
Lab Smp Id: IC-131790 Client Smp ID: 500 PPB
Inj Date : 02-JUN-2011 13:33
Operator : WBR Inst ID: 2860_2.i
Smp Info : IC-131790,1,500 PPB
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN110958.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:36 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:33 Cal File: 02jun110958-r061.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

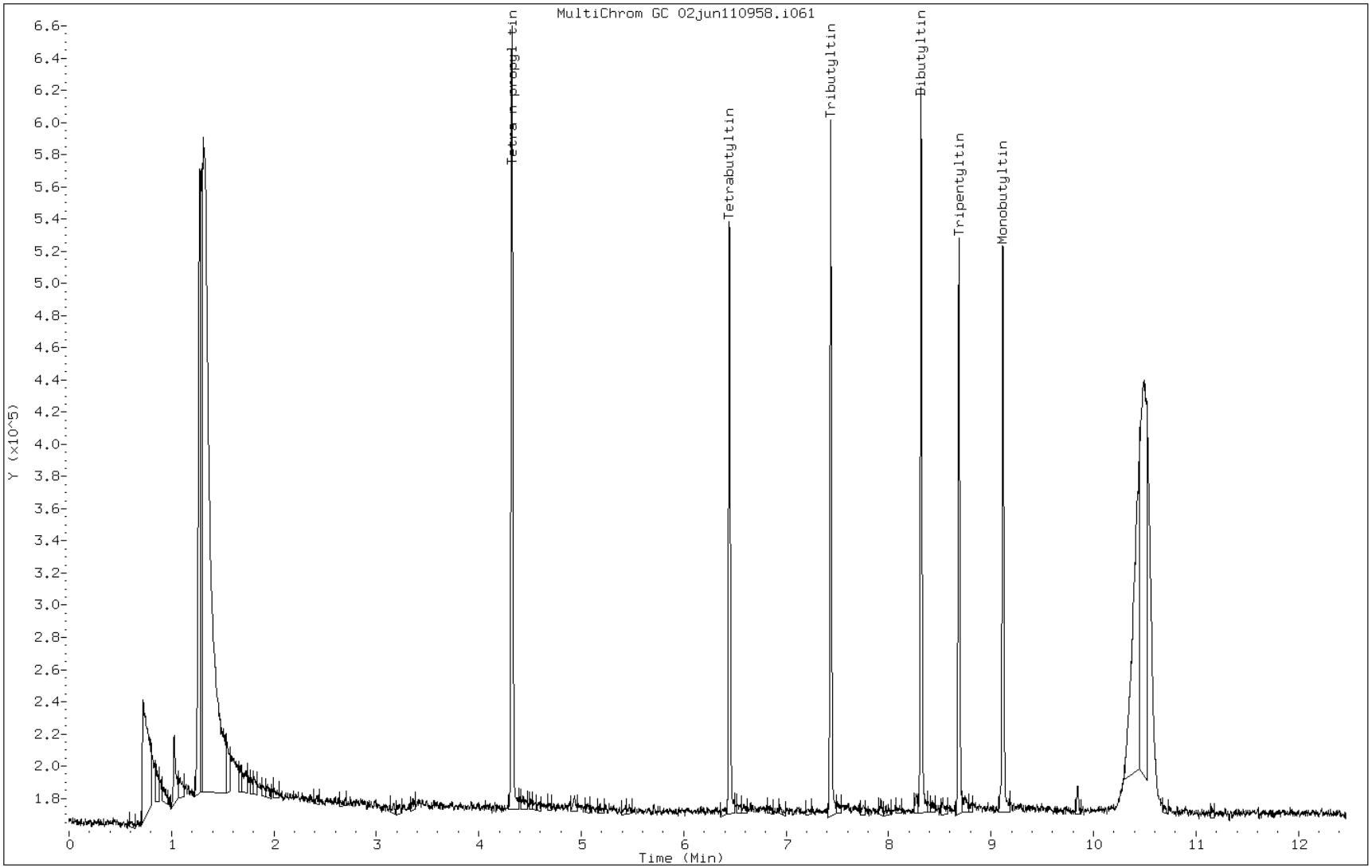
Cpnd Variable Local Compound Variable

		RT	EXP RT (REL RT)	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
*	1 Tetra-n-propyl tin						CAS #: 2176-98-9
		4.325	4.300 (1.000)	617884	500.000		
	2 Tetrabutyltin						CAS #: 1461-25-2
		6.446	6.439 (1.491)	422704	500.000	452.9	
	3 Tributyltin						CAS #: 688-73-3
		7.435	7.430 (1.719)	494869	445.000	411.2	
	4 Dibutyltin						CAS #: 1002-53-5
		8.317	8.310 (1.923)	521383	385.000	365.2	
$	5 Tripentyltin						CAS #: 3342-67-4
		8.687	8.683 (2.009)	423892	450.000	410.6	

			AMOUNTS	
			CAL-AMT	ON-COL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	====== ========	========	=======	=======
6 Monobutyltin				CAS #: 2406-65-7
9.115	9.111 (2.108)	439786	310.000	295.9

Data File: 02jun110958-r061.d
Client ID: 500 PPB
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: IC-131790,1,500 PPB
Lab Sample ID: IC-131790

Date: 02-JUN-2011 13:33
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN110958.b/02jun110958-r071.d
Lab Smp Id: IC-131791 Client Smp ID: 1000 PPB
Inj Date : 02-JUN-2011 13:50
Operator : WBR Inst ID: 2860_2.i
Smp Info : IC-131791,1,1000 PPB
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN110958.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:36 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

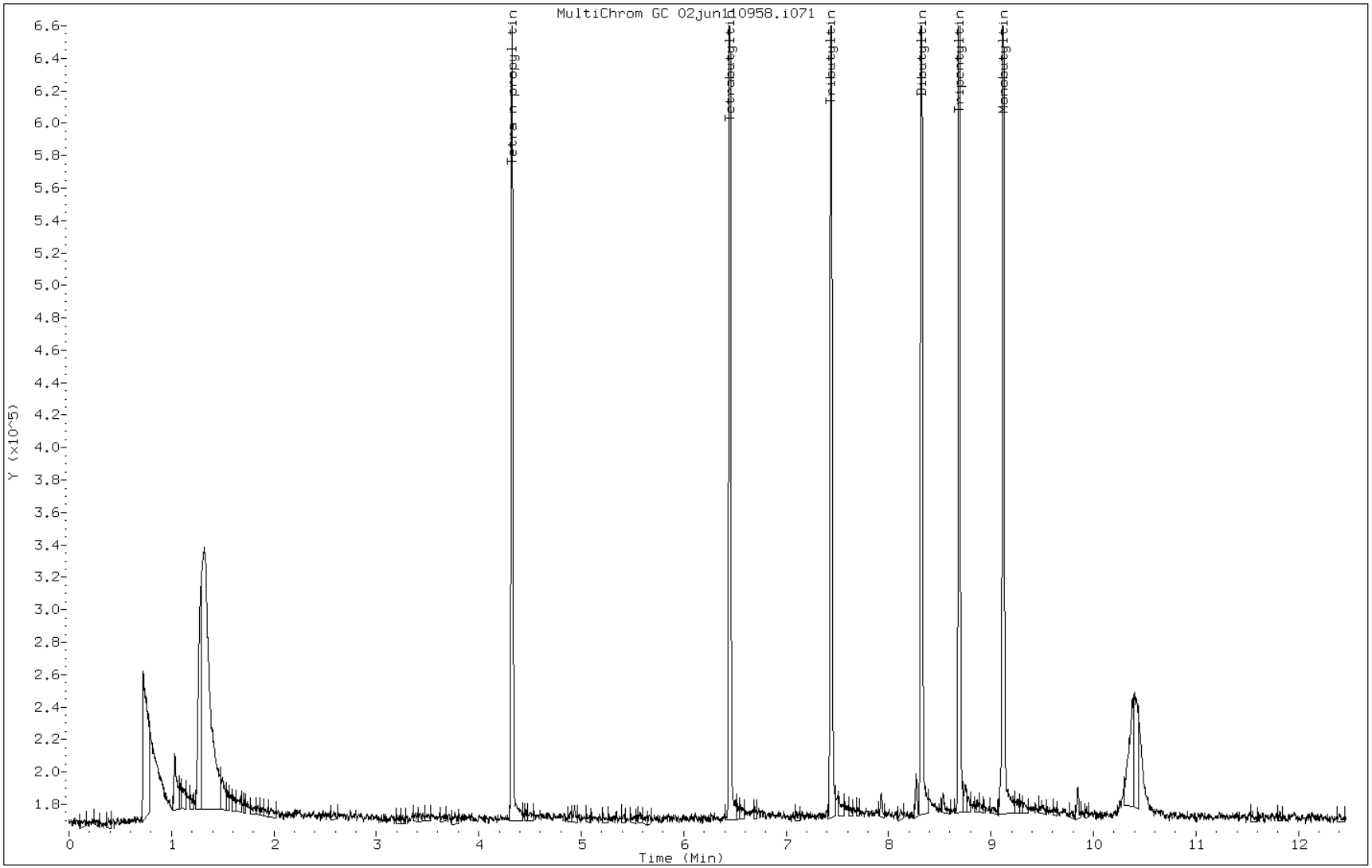
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
*	1 Tetra-n-propyl tin					CAS #: 2176-98-9
	4.325	4.300 (1.000)	635979	500.000		
	2 Tetrabutyltin					CAS #: 1461-25-2
	6.450	6.439 (1.492)	849402	1000.00	884.1	
	3 Tributyltin					CAS #: 688-73-3
	7.439	7.430 (1.720)	968495	890.000	781.8	
	4 Dibutyltin					CAS #: 1002-53-5
	8.321	8.310 (1.924)	1012080	770.000	688.7	
$	5 Tripentyltin					CAS #: 3342-67-4
	8.689	8.683 (2.009)	874446	900.000	822.9	

			AMOUNTS	
			CAL-AMT	ON-COL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	====== ========	========	=======	=======
6 Monobutyltin				CAS #: 2406-65-7
9.117	9.111 (2.108)	938748	620.000	613.7

Data File:	02jun110958-r071.d	Date:	02-JUN-2011 13:50
Client ID:	1000 PPB	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	IC-131791,1,1000 PPB		
Lab Sample ID:	IC-131791		



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Lab Sample ID: ICV 200-19102/6 Calibration Date: 06/02/2011 14:24

Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42

GC Column: RTX-35 ID: 0.32(mm) Calib End Date: 06/02/2011 13:50

Lab File ID: 02jun110958-r091.d Conc. Units: ug/L

EPA Sample No.: ICV

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrabutyltin	Ave	0.7015	0.7794		278	250	11.1	25.0
Tributyltin	Ave	0.9082	0.9785		240	222	7.7	25.0
Dibutyltin	Ave	1.119	1.172		202	192	4.8	25.0
Monobutyltin	Ave	0.998	1.138		177	155	14.0	25.0
Tripentyltin	Ave	0.6749	0.6989		233	225	3.6	25.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Lab Sample ID: ICV 200-19102/6 Calibration Date: 06/02/2011 14:24

Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42

GC Column: RTX-35 ID: 0.32(mm) Calib End Date: 06/02/2011 13:50

Lab File ID: 02jun110958-r091.d

Analyte	RT	RT WINDOW	
		TO	FROM
Tetrabutyltin	5.28	5.23	5.33
Tributyltin	6.30	6.25	6.35
Dibutyltin	7.20	7.14	7.24
Monobutyltin	8.00	7.95	8.05
Tripentyltin	7.56	7.50	7.60

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN110958.b/02jun110958-r091.d
Lab Smp Id: ICV-131792 Client Smp ID: ICV
Inj Date : 02-JUN-2011 14:24
Operator : WBR Inst ID: 2860_1.i
Smp Info : ICV-131792,1,ICV
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN110958.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:48 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICV.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

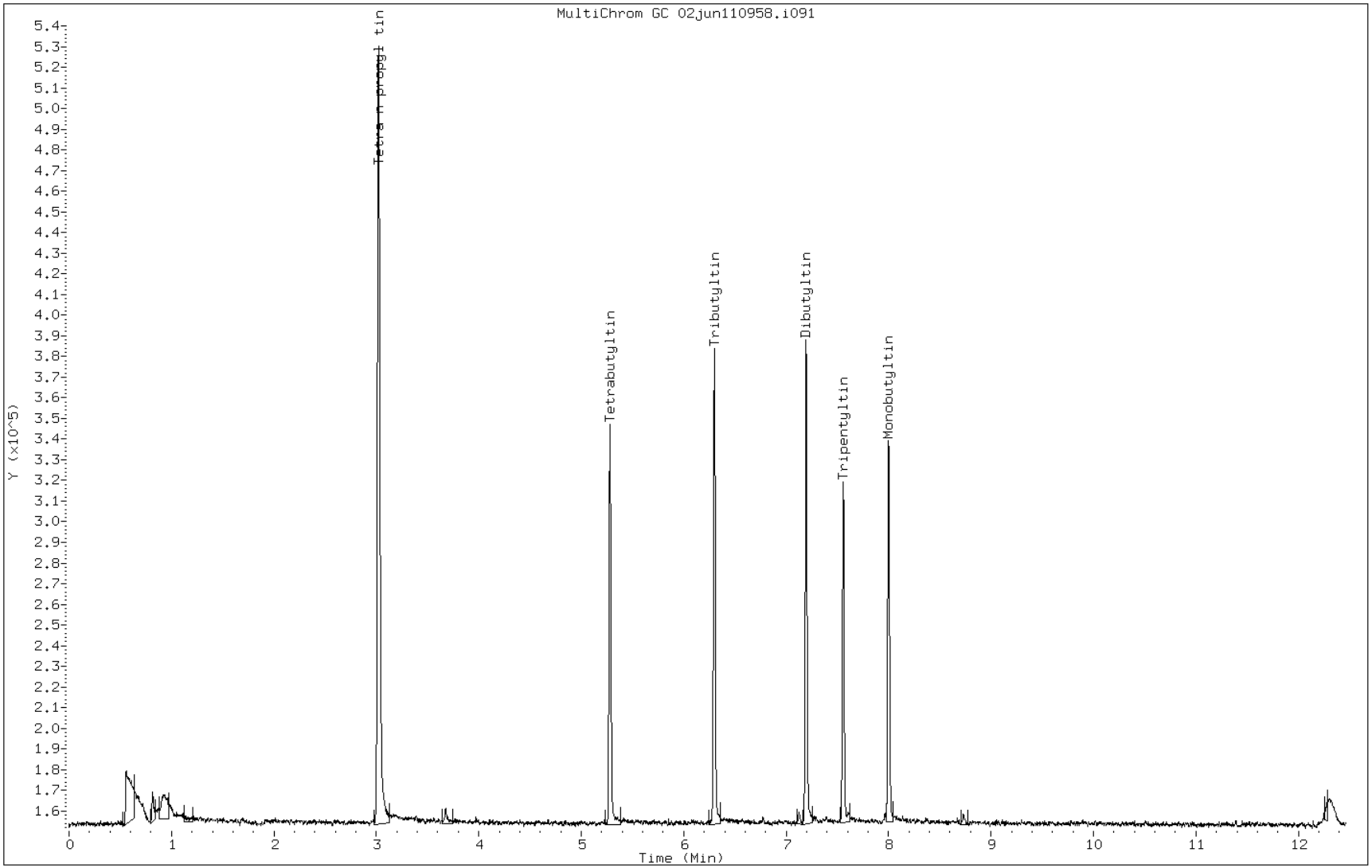
Cpnd Variable Local Compound Variable

		RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
*	1 Tetra-n-propyl tin					CAS #: 2176-98-9
		3.021	3.017 (1.000)	648587	500.000	
	2 Tetrabutyltin					CAS #: 1461-25-2
		5.280	5.276 (1.748)	252744	277.763	277.8
	3 Tributyltin					CAS #: 688-73-3
		6.300	6.295 (2.085)	282404	239.706	239.7
	4 Dibutyltin					CAS #: 1002-53-5
		7.195	7.191 (2.381)	292689	201.715	201.7
$	5 Tripentyltin					CAS #: 3342-67-4
		7.557	7.554 (2.501)	203987	232.993	233.0

RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
6 Monobutyltin				CAS #: 2406-65-7
8.000	7.996 (2.648)	228740	176.668	176.7

Data File: 02jun110958-r091.d
Client ID: ICV
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: ICV-131792,1,ICV
Lab Sample ID: ICV-131792

Date: 02-JUN-2011 14:24
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Lab Sample ID: ICV 200-19102/6 Calibration Date: 06/02/2011 14:24

Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 06/02/2011 13:50

Lab File ID: 02jun110958-r091.d Conc. Units: ug/L

EPA Sample No.: ICV

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrabutyltin	Ave	0.7553	0.7306		242	250	-3.3	25.0
Tributyltin	Ave	0.9739	0.9279		212	222	-4.7	25.0
Dibutyltin	Ave	1.155	1.124		187	192	-2.7	25.0
Monobutyltin	Ave	1.203	1.200		155	155	-0.2	25.0
Tripentyltin	Ave	0.8354	0.8028		216	225	-3.9	25.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Lab Sample ID: ICV 200-19102/6 Calibration Date: 06/02/2011 14:24

Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 06/02/2011 13:50

Lab File ID: 02jun110958-r091.d

Analyte	RT	RT WINDOW	
		TO	FROM
Tetrabutyltin	6.44	6.39	6.49
Tributyltin	7.43	7.38	7.48
Dibutyltin	8.31	8.26	8.36
Monobutyltin	9.11	9.06	9.16
Tripentyltin	8.68	8.63	8.73

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN110958.b/02jun110958-r091.d
Lab Smp Id: ICV-131792 Client Smp ID: ICV
Inj Date : 02-JUN-2011 14:24
Operator : WBR Inst ID: 2860_2.i
Smp Info : ICV-131792,1,ICV
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN110958.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:37 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ICV.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

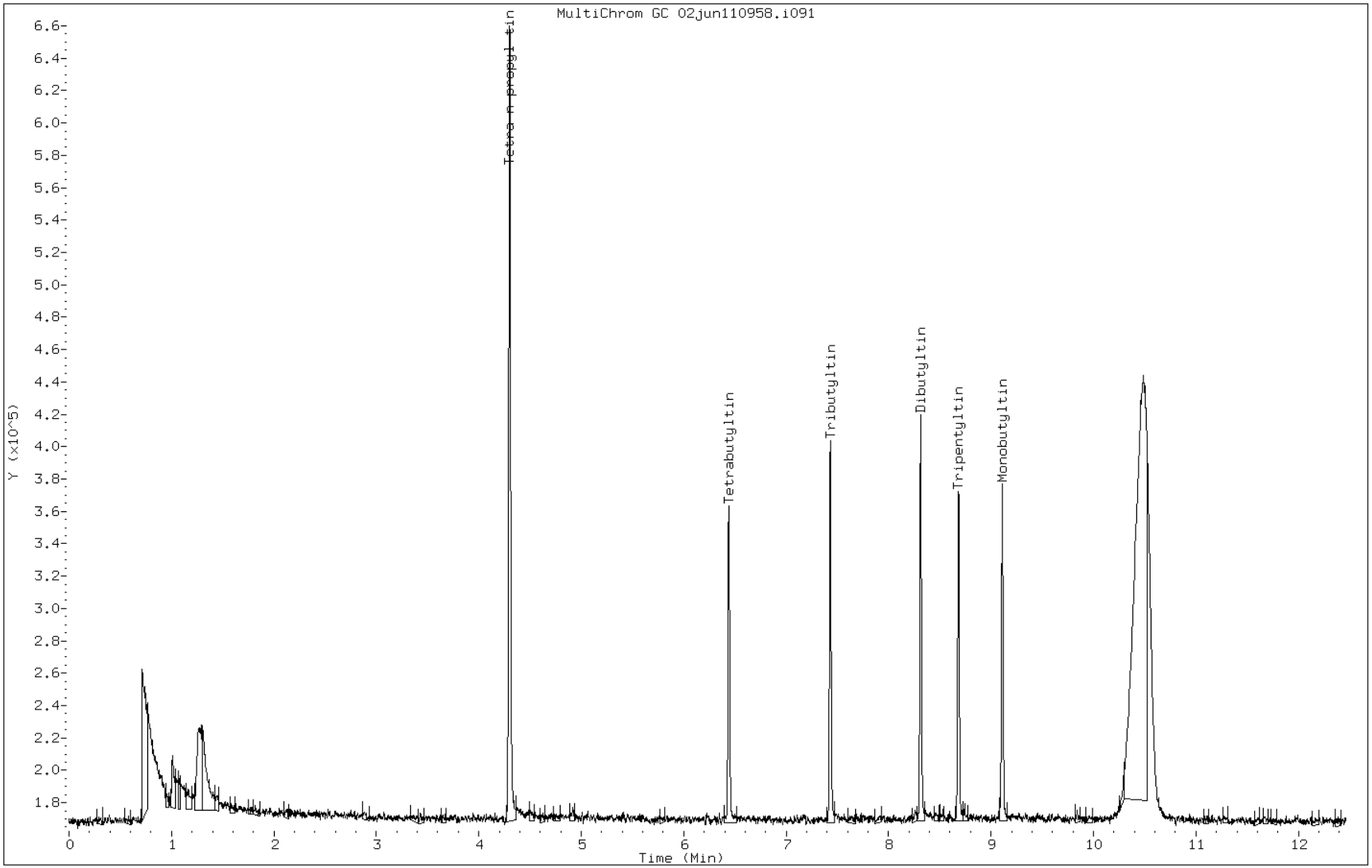
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

			CONCENTRATIONS ON-COL	FINAL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
4.300	4.300 (1.000)	659343	500.000	
2 Tetrabutyltin				CAS #: 1461-25-2
6.442	6.439 (1.498)	240848	241.815	241.8
3 Tributyltin				CAS #: 688-73-3
7.430	7.430 (1.728)	272256	211.998	212.0
4 Dibutyltin				CAS #: 1002-53-5
8.312	8.310 (1.933)	285342	187.277	187.3
$ 5 Tripentyltin				CAS #: 3342-67-4
8.683	8.683 (2.019)	238184	216.214	216.2

RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
6 Monobutyltin				CAS #: 2406-65-7
9.111	9.111 (2.119)	245329	154.703	154.7

Data File:	02jun110958-r091.d	Date:	02-JUN-2011 14:24
Client ID:	ICV	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	ICV-131792,1,ICV		
Lab Sample ID:	ICV-131792		



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Lab Sample ID: CCV 200-19104/11 Calibration Date: 06/02/2011 17:30

Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42

GC Column: RTX-35 ID: 0.32(mm) Calib End Date: 06/02/2011 13:50

Lab File ID: 02jun111106-r111.d Conc. Units: ug/L

EPA Sample No.: 250 PPB

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrabutyltin	Ave	0.7015	0.7748		276	250	10.5	25.0
Tributyltin	Ave	0.9082	0.9909		243	222	9.1	25.0
Dibutyltin	Ave	1.119	1.166		201	192	4.2	25.0
Monobutyltin	Ave	0.998	1.136		176	155	13.8	25.0
Tripentyltin	Ave	0.6749	0.7551		252	225	11.9	25.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Lab Sample ID: CCV 200-19104/11 Calibration Date: 06/02/2011 17:30

Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42

GC Column: RTX-35 ID: 0.32(mm) Calib End Date: 06/02/2011 13:50

Lab File ID: 02jun111106-r111.d

Analyte	RT	RT WINDOW	
		TO	FROM
Tetrabutyltin	5.30	5.23	5.33
Tributyltin	6.32	6.25	6.35
Dibutyltin	7.21	7.14	7.24
Monobutyltin	8.02	7.95	8.05
Tripentyltin	7.57	7.50	7.60

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN111106.b/02jun111106-r111.d
Lab Smp Id: CCV-131789 Client Smp ID: 250 PPB
Inj Date : 02-JUN-2011 17:30
Operator : WBR Inst ID: 2860_1.i
Smp Info : CCV-131789,1,250 PPB
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:50 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

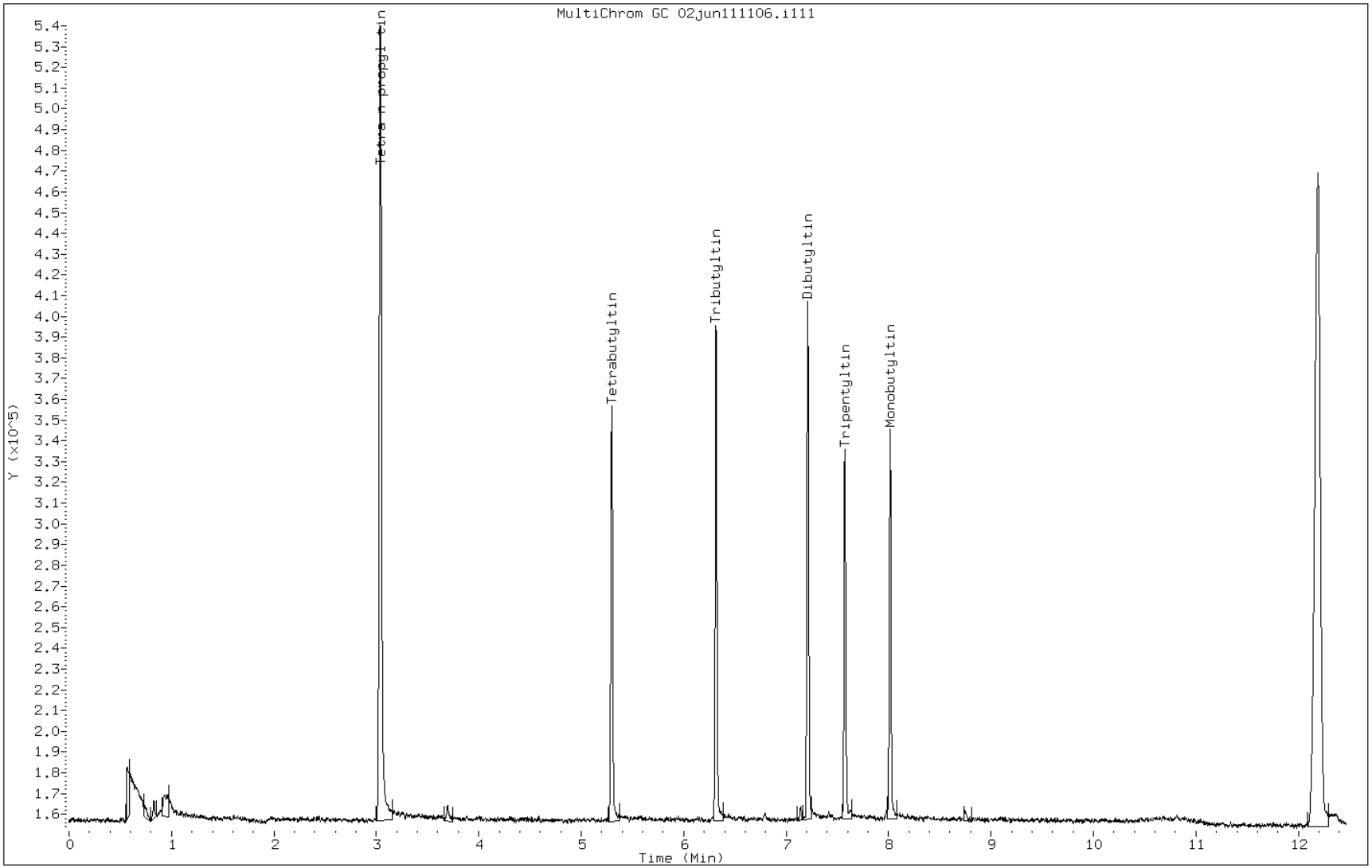
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
*	1 Tetra-n-propyl tin					CAS #: 2176-98-9
	3.039	3.017 (1.000)	665100	500.000		
	2 Tetrabutyltin					CAS #: 1461-25-2
	5.298	5.276 (1.743)	257673	250.000	276.1	
	3 Tributyltin					CAS #: 688-73-3
	6.315	6.295 (2.078)	293277	223.000	242.8	
	4 Dibutyltin					CAS #: 1002-53-5
	7.211	7.191 (2.373)	298532	193.000	200.6	
$	5 Tripentyltin					CAS #: 3342-67-4
	7.572	7.554 (2.492)	225986	225.000	251.7	

			AMOUNTS	
			CAL-AMT	ON-COL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	====== ========	========	=======	=======
6 Monobutyltin				CAS #: 2406-65-7
8.015	7.996 (2.637)	234242	155.000	176.4

Data File:	02jun111106-r111.d	Date:	02-JUN-2011 17:30
Client ID:	250 PPB	Instrument:	2860_1.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-35		
Sample Info:	CCV-131789,1,250 PPB		
Lab Sample ID:	CCV-131789		



FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Lab Sample ID: CCV 200-19104/11 Calibration Date: 06/02/2011 17:30

Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 06/02/2011 13:50

Lab File ID: 02jun111106-r111.d Conc. Units: ug/L

EPA Sample No.: 250 PPB

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrabutyltin	Ave	0.7553	0.7270		241	250	-3.7	25.0
Tributyltin	Ave	0.9739	0.9700		222	222	-0.4	25.0
Dibutyltin	Ave	1.155	1.191		198	192	3.1	25.0
Monobutyltin	Ave	1.203	1.247		161	155	3.7	25.0
Tripentyltin	Ave	0.8354	0.8852		238	225	6.0	25.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Lab Sample ID: CCV 200-19104/11 Calibration Date: 06/02/2011 17:30

Instrument ID: 2860.i Calib Start Date: 06/02/2011 12:42

GC Column: RTX-5 ID: 0.32(mm) Calib End Date: 06/02/2011 13:50

Lab File ID: 02jun111106-r111.d

Analyte	RT	RT WINDOW	
		TO	FROM
Tetrabutyltin	6.45	6.39	6.49
Tributyltin	7.45	7.38	7.48
Dibutyltin	8.33	8.26	8.36
Monobutyltin	9.12	9.06	9.16
Tripentyltin	8.70	8.63	8.73

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN111106.b/02jun111106-r111.d
Lab Smp Id: CCV-131789 Client Smp ID: 250 PPB
Inj Date : 02-JUN-2011 17:30
Operator : WBR Inst ID: 2860_2.i
Smp Info : CCV-131789,1,250 PPB
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

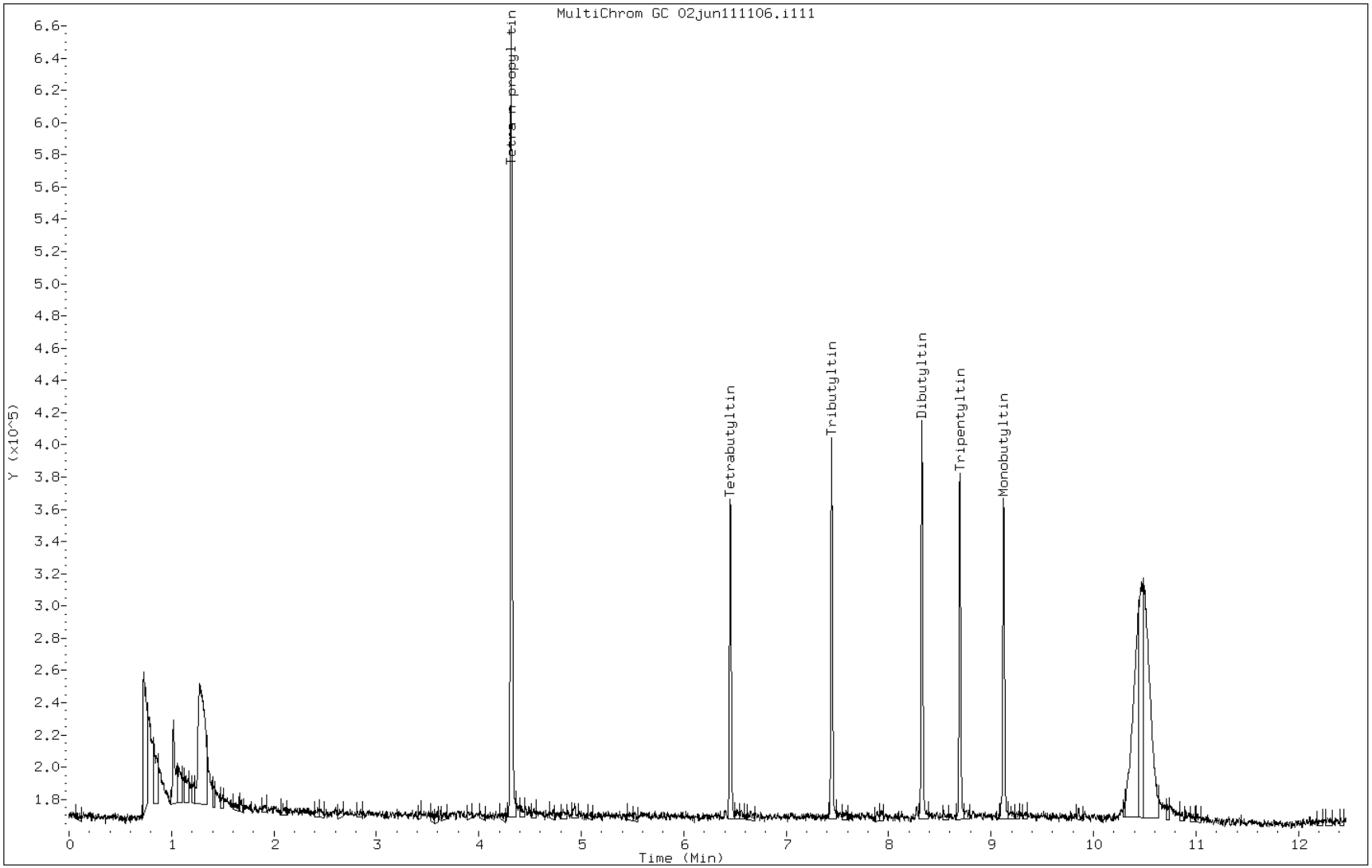
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	
*	1 Tetra-n-propyl tin					CAS #: 2176-98-9
	4.316	4.300 (1.000)	631832	500.000		
	2 Tetrabutyltin					CAS #: 1461-25-2
	6.455	6.439 (1.496)	229666	250.000	240.6	
	3 Tributyltin					CAS #: 688-73-3
	7.446	7.430 (1.725)	272716	223.000	221.6	
	4 Dibutyltin					CAS #: 1002-53-5
	8.326	8.310 (1.929)	289753	193.000	198.5	
$	5 Tripentyltin					CAS #: 3342-67-4
	8.696	8.683 (2.015)	251691	225.000	238.4	

			AMOUNTS	
			CAL-AMT	ON-COL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
==	====== ========	========	=======	=======
6 Monobutyltin				CAS #: 2406-65-7
9.124	9.111 (2.114)	244161	155.000	160.7

Data File:	02jun111106-r111.d	Date:	02-JUN-2011 17:30
Client ID:	250 PPB	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	CCV-131789,1,250 PPB		
Lab Sample ID:	CCV-131789		



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: Lab Sample ID: MB 200-18670/1-A

Matrix: Water Lab File ID: 02jun111106-r081.d

Analysis Method: Organotins/GC Date Collected:

Extraction Method: 3510C Date Extracted: 05/26/2011 20:40

Sample wt/vol: 1000(mL) Date Analyzed: 06/02/2011 16:40

Con. Extract Vol.: 1000(uL) Dilution Factor: 1

Injection Volume: 1.5(uL) GC Column: RTX-35 ID: 0.32(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	0.050	U	0.050	0.012
688-73-3	Tributyltin	0.045	U	0.045	0.012
1002-53-5	Dibutyltin	0.039	U	0.039	0.0084
2406-65-7	Monobutyltin	0.50	U J	0.50	0.50

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	101		15-150

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN111106.b/02jun111106-r081.d
Lab Smp Id: MB 200-18670/1-A Client Smp ID: MB 200-18670/1-A
Inj Date : 02-JUN-2011 16:40
Operator : WBR Inst ID: 2860_1.i
Smp Info : MB 200-18670/1-A
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

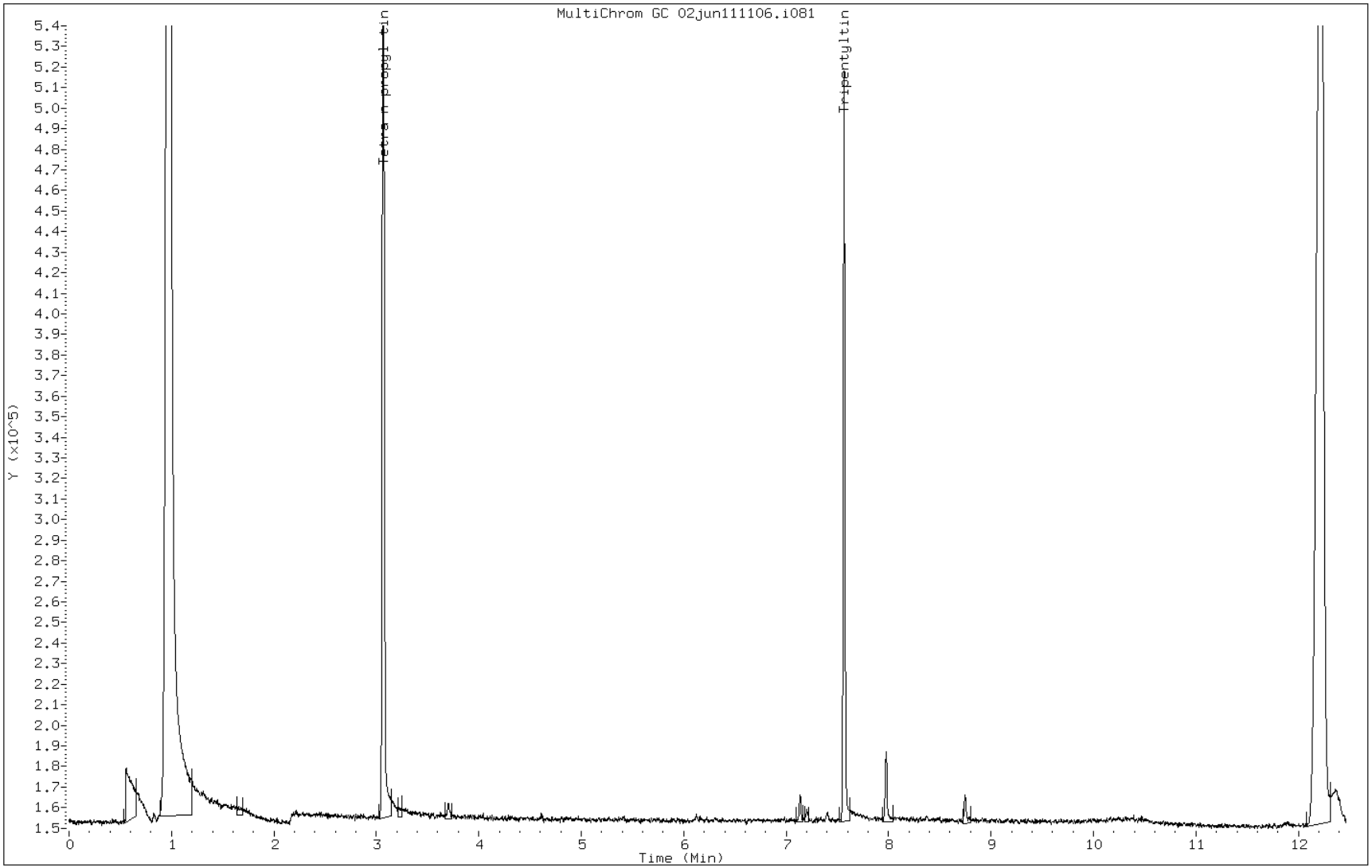
			CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	
RT	EXP RT (REL RT)	RESPONSE			
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9	
3.068	3.017 (0.000)	715605	500.000		(M)
$ 5 Tripentyltin				CAS #: 3342-67-4	
7.565	7.554 (1.000)	438129	453.563	453.6	

QC Flag Legend

M - Compound response manually integrated.

Data File: 02jun111106-r081.d
Client ID: MB 200-18670/1-A
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: MB 200-18670/1-A
Lab Sample ID: MB 200-18670/1-A

Date: 02-JUN-2011 16:40
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: Lab Sample ID: MB 200-18670/1-A

Matrix: Water Lab File ID: 02jun111106-r081.d

Analysis Method: Organotins/GC Date Collected:

Extraction Method: 3510C Date Extracted: 05/26/2011 20:40

Sample wt/vol: 1000(mL) Date Analyzed: 06/02/2011 16:40

Con. Extract Vol.: 1000(uL) Dilution Factor: 1

Injection Volume: 1.5(uL) GC Column: RTX-5 ID: 0.32(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	97		15-150

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN111106.b/02jun111106-r081.d
Lab Smp Id: MB 200-18670/1-A Client Smp ID: MB 200-18670/1-A
Inj Date : 02-JUN-2011 16:40
Operator : WBR Inst ID: 2860_2.i
Smp Info : MB 200-18670/1-A
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

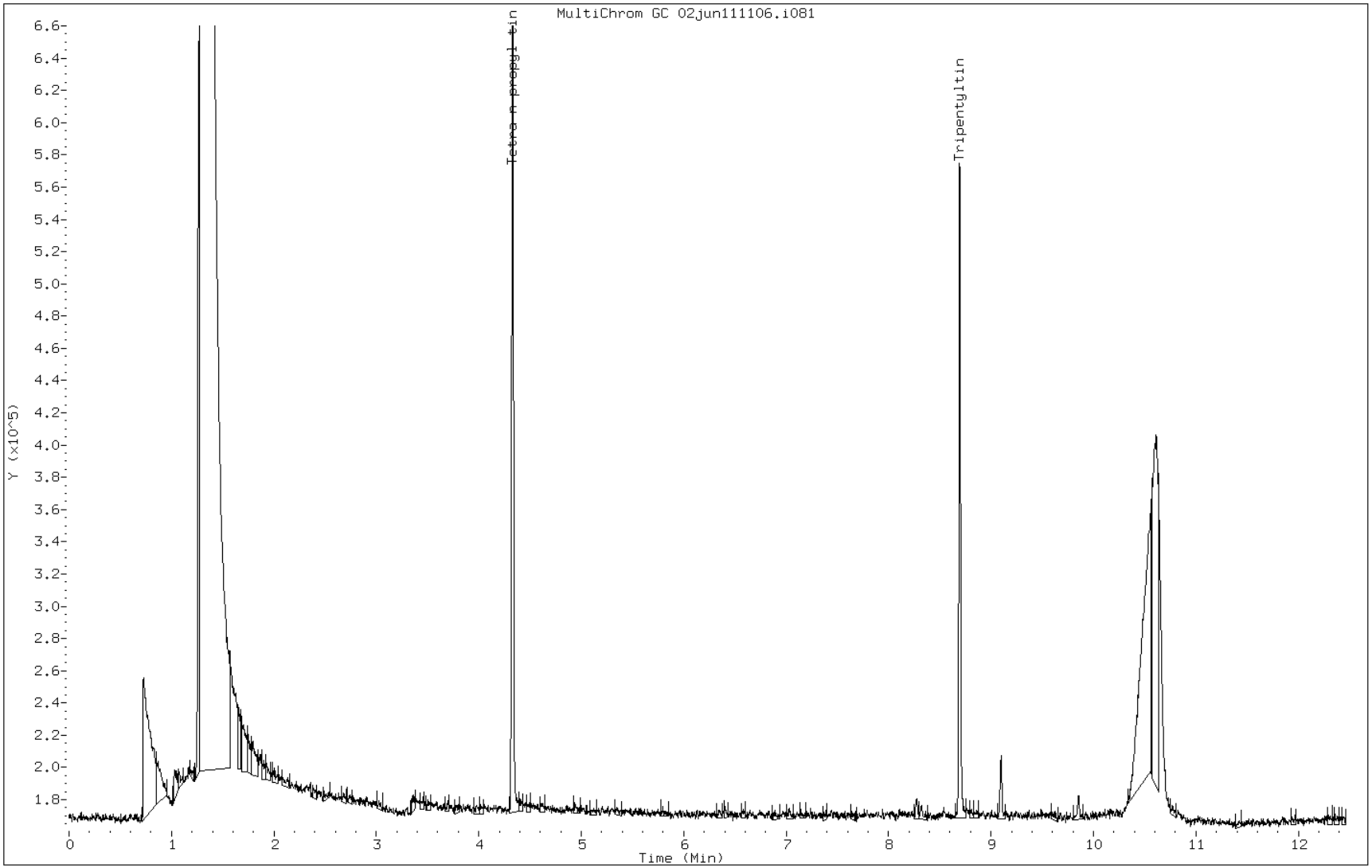
Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

			CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
RT	EXP RT (REL RT)	RESPONSE		
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
4.329	4.300 (1.000)	646455	500.000	
$ 5 Tripentyltin				CAS #: 3342-67-4
8.694	8.683 (2.008)	472209	437.197	437.2

Data File:	02jun111106-r081.d	Date:	02-JUN-2011 16:40
Client ID:	MB 200-18670/1-A	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	MB 200-18670/1-A		
Lab Sample ID:	MB 200-18670/1-A		



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: | Lab Sample ID: MB 200-18879/1-A

Matrix: Solid | Lab File ID: 02jun111106-r011.d

Analysis Method: Organotins/GC | Date Collected:

Extraction Method: 3550B | Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.00(g) | Date Analyzed: 06/02/2011 14:41

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1.5(uL) | GC Column: RTX-35 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	1.7	U	1.7	0.44
688-73-3	Tributyltin	1.5	U	1.5	0.67
1002-53-5	Dibutyltin	1.3	U	1.3	0.40
2406-65-7	Monobutyltin	5.0	U J	5.0	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	102		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN111106.b/02jun111106-r011.d
Lab Smp Id: MB 200-18879/1-A Client Smp ID: MB 200-18879/1-A
Inj Date : 02-JUN-2011 14:41
Operator : WBR Inst ID: 2860_1.i
Smp Info : MB 200-18879/1-A
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

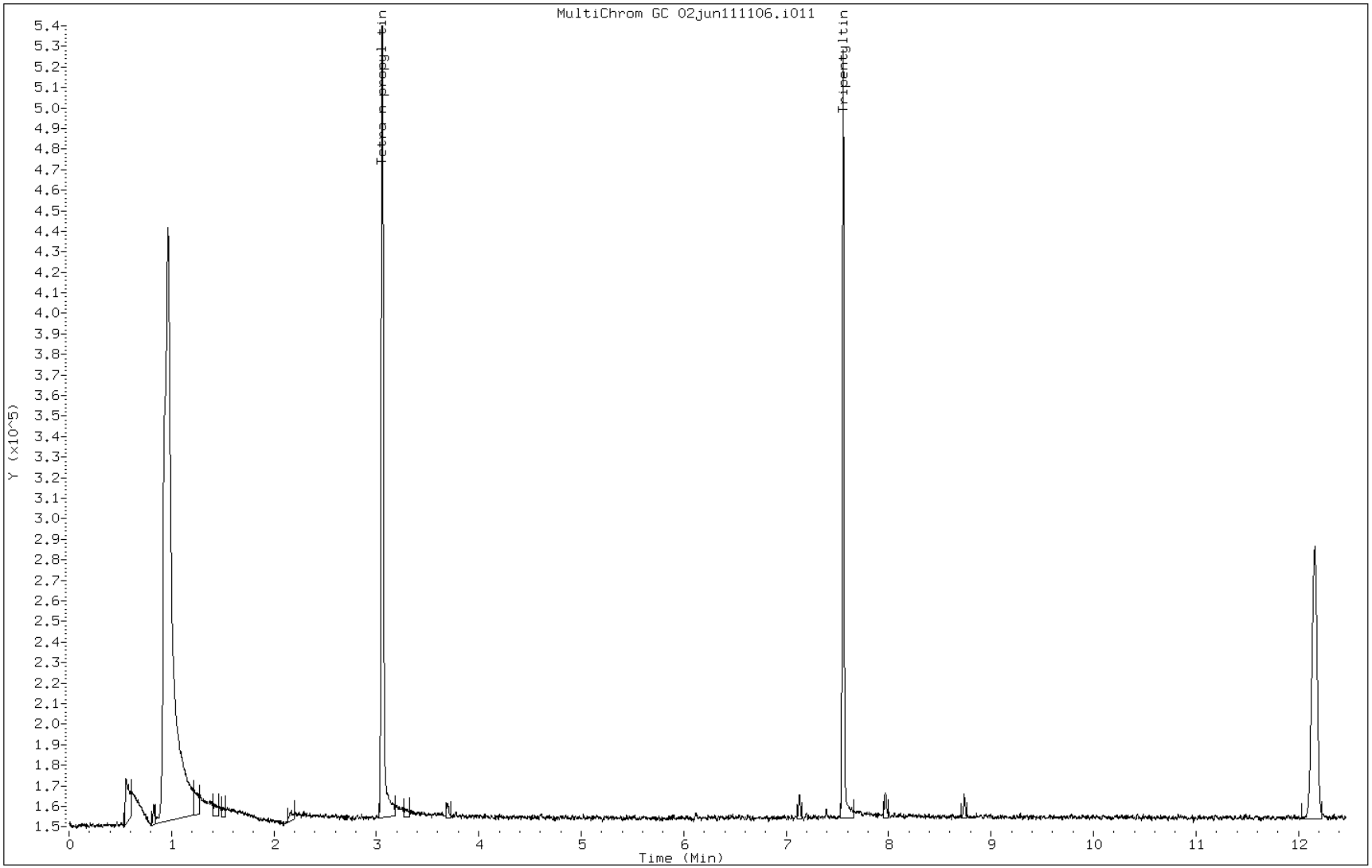
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

			CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
RT	EXP RT (REL RT)	RESPONSE		
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
3.057	3.017 (1.000)	739634	500.000	
$ 5 Tripentyltin				CAS #: 3342-67-4
7.557	7.554 (2.472)	458751	459.482	459.5

Data File: 02jun111106-r011.d
Client ID: MB 200-18879/1-A
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: MB 200-18879/1-A
Lab Sample ID: MB 200-18879/1-A

Date: 02-JUN-2011 14:41
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: | Lab Sample ID: MB 200-18879/1-A

Matrix: Solid | Lab File ID: 02jun111106-r011.d

Analysis Method: Organotins/GC | Date Collected:

Extraction Method: 3550B | Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.00(g) | Date Analyzed: 06/02/2011 14:41

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1.5(uL) | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	99		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN111106.b/02jun111106-r011.d
Lab Smp Id: MB 200-18879/1-A Client Smp ID: MB 200-18879/1-A
Inj Date : 02-JUN-2011 14:41
Operator : WBR Inst ID: 2860_2.i
Smp Info : MB 200-18879/1-A
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

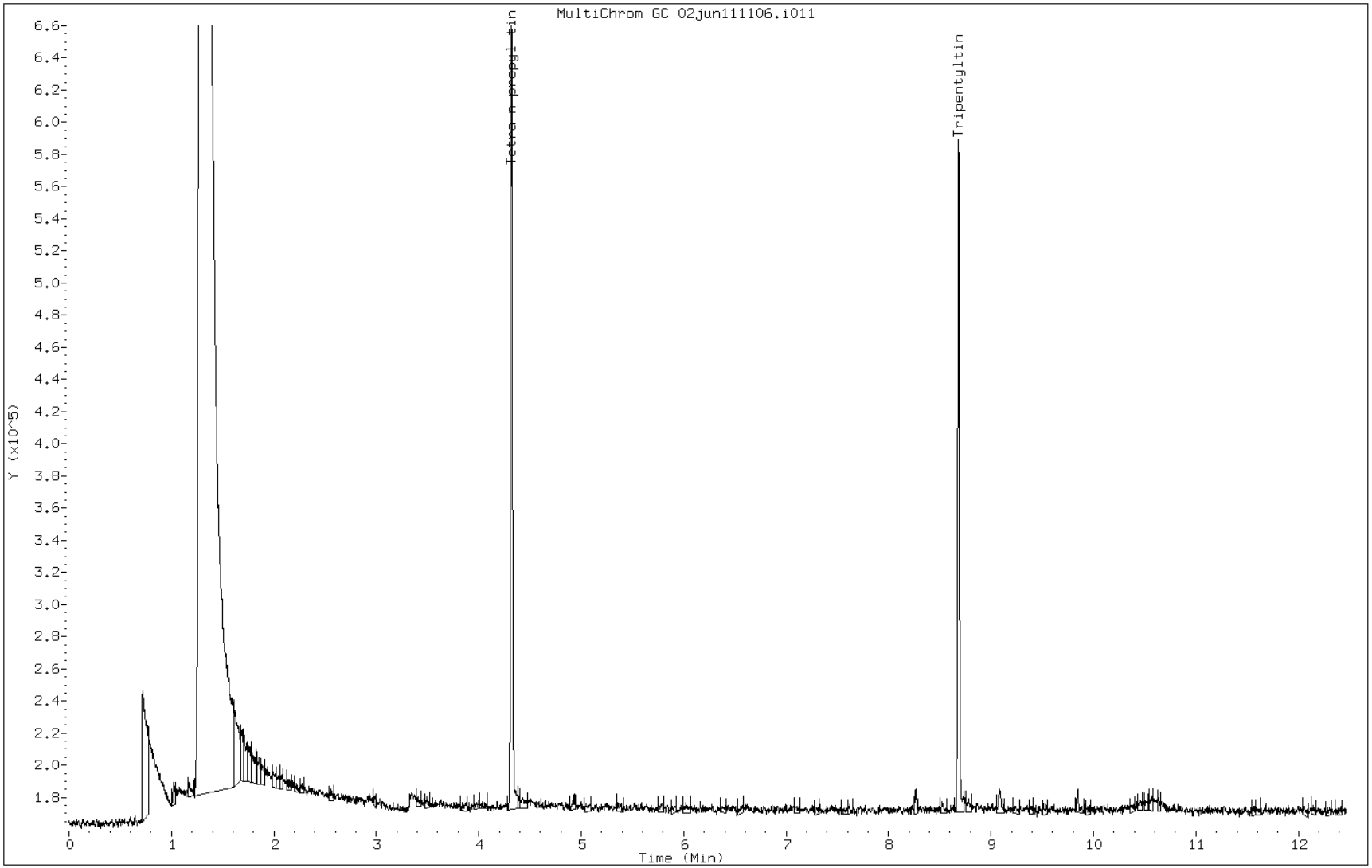
Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

			CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
RT	EXP RT (REL RT)	RESPONSE		
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
4.318	4.300 (1.000)	659962	500.000	
$ 5 Tripentyltin				CAS #: 3342-67-4
8.683	8.683 (2.011)	488762	443.262	443.3

Data File:	02jun111106-r011.d	Date:	02-JUN-2011 14:41
Client ID:	MB 200-18879/1-A	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	MB 200-18879/1-A		
Lab Sample ID:	MB 200-18879/1-A		



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: Lab Sample ID: LCS 200-18670/2-A

Matrix: Water Lab File ID: 02jun111106-r091.d

Analysis Method: Organotins/GC Date Collected:

Extraction Method: 3510C Date Extracted: 05/26/2011 20:40

Sample wt/vol: 1000(mL) Date Analyzed: 06/02/2011 16:56

Con. Extract Vol.: 1000(uL) Dilution Factor: 1

Injection Volume: 1.5(uL) GC Column: RTX-35 ID: 0.32(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1002-53-5	Dibutyltin	0.295		0.039	0.0084
2406-65-7	Monobutyltin	0.50	U J	0.50	0.50

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	83		15-150

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN111106.b/02jun111106-r091.d
Lab Smp Id: LCS 200-18670/2-A Client Smp ID: LCS 200-18670/2-A
Inj Date : 02-JUN-2011 16:56
Operator : WBR Inst ID: 2860_1.i
Smp Info : LCS 200-18670/2-A
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

		RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	
*	1 Tetra-n-propyl tin					CAS #: 2176-98-9	
		3.086	3.017 (0.000)	909190	500.000		(M)
	2 Tetrabutyltin					CAS #: 1461-25-2	
		5.302	5.276 (1.000)	505654	396.425	396.4	
	3 Tributyltin					CAS #: 688-73-3	
		6.315	6.295 (1.000)	577712	349.810	349.8	
	4 Dibutyltin					CAS #: 1002-53-5	
		7.211	7.191 (1.000)	600588	295.272	295.3	
$	5 Tripentyltin					CAS #: 3342-67-4	
		7.572	7.554 (1.000)	458045	373.218	373.2	

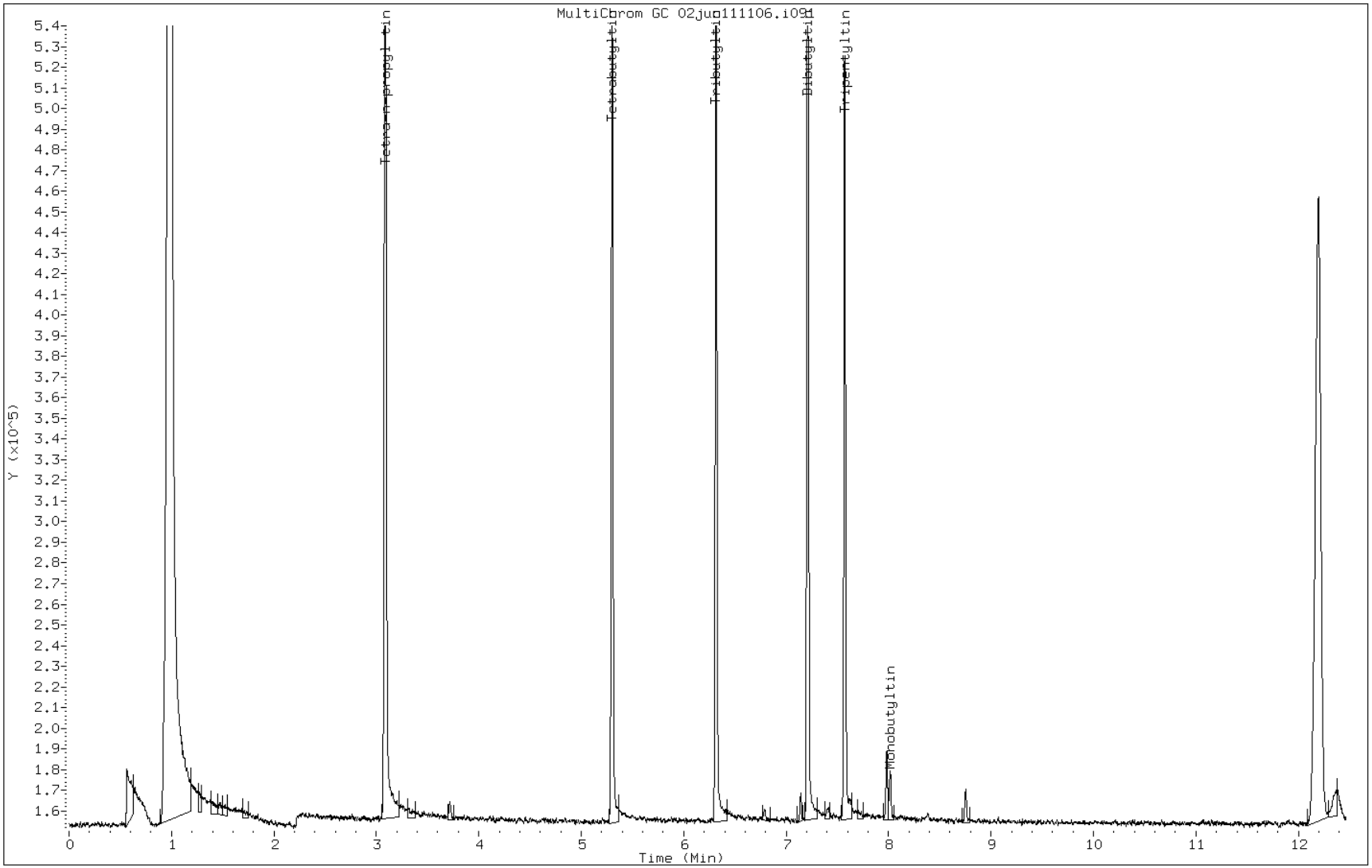
RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	
6 Monobutyltin				CAS #: 2406-65-7	
8.015	7.996 (1.000)	32458	17.8834	17.88	(aRM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: 02jun111106-r091.d
Client ID: LCS 200-18670/2-A
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: LCS 200-18670/2-A
Lab Sample ID: LCS 200-18670/2-A

Date: 02-JUN-2011 16:56
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



Manual Integration Report

Data File: 02jun111106-r091.d
Lab Sample ID: LCS 200-18670/2-A
Inj. Date and Time: 02-JUN-2011 16:56
Instrument ID: 2860_1.i
Client ID: LCS 200-18670/2-A
Compound: 6 Monobutyltin
CAS #: 2406-65-7
Report Date: 06/06/2011

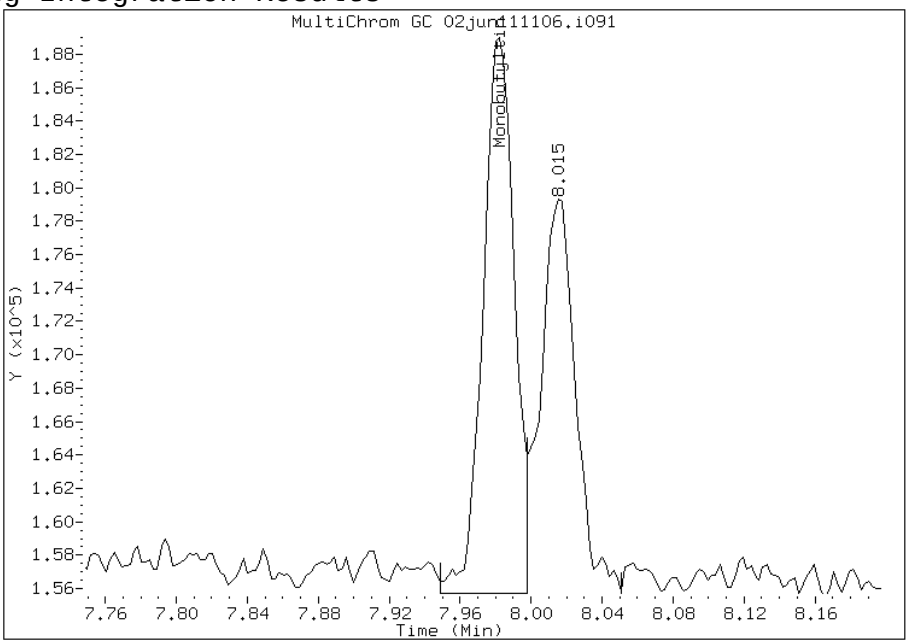
Processing Integration Results

RT: 7.98

Response: 40702

Amount: 0.000000

Conc: 0.000000



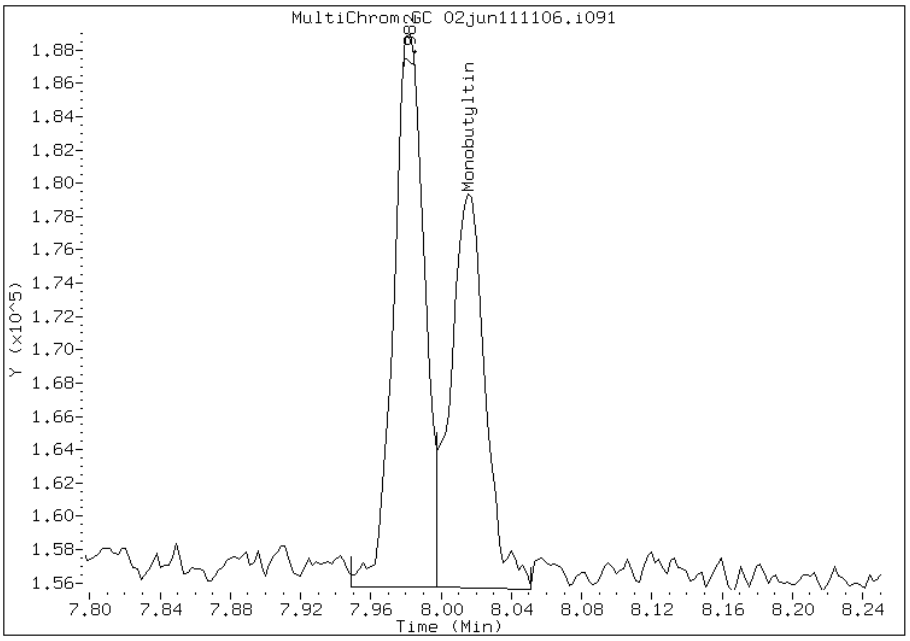
Manual Integration Results

RT: 8.02

Response: 32458

Amount: 17.88

Conc: 17.88



File Uploaded By: wbr
Manual Integration Reason: Analyte misidentified by the data system

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: Lab Sample ID: LCS 200-18670/2-A

Matrix: Water Lab File ID: 02jun111106-r091.d

Analysis Method: Organotins/GC Date Collected:

Extraction Method: 3510C Date Extracted: 05/26/2011 20:40

Sample wt/vol: 1000(mL) Date Analyzed: 06/02/2011 16:56

Con. Extract Vol.: 1000(uL) Dilution Factor: 1

Injection Volume: 1.5(uL) GC Column: RTX-5 ID: 0.32(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	0.389		0.050	0.012
688-73-3	Tributyltin	0.337		0.045	0.012

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	86		15-150

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN111106.b/02jun111106-r091.d
Lab Smp Id: LCS 200-18670/2-A Client Smp ID: LCS 200-18670/2-A
Inj Date : 02-JUN-2011 16:56
Operator : WBR Inst ID: 2860_2.i
Smp Info : LCS 200-18670/2-A
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

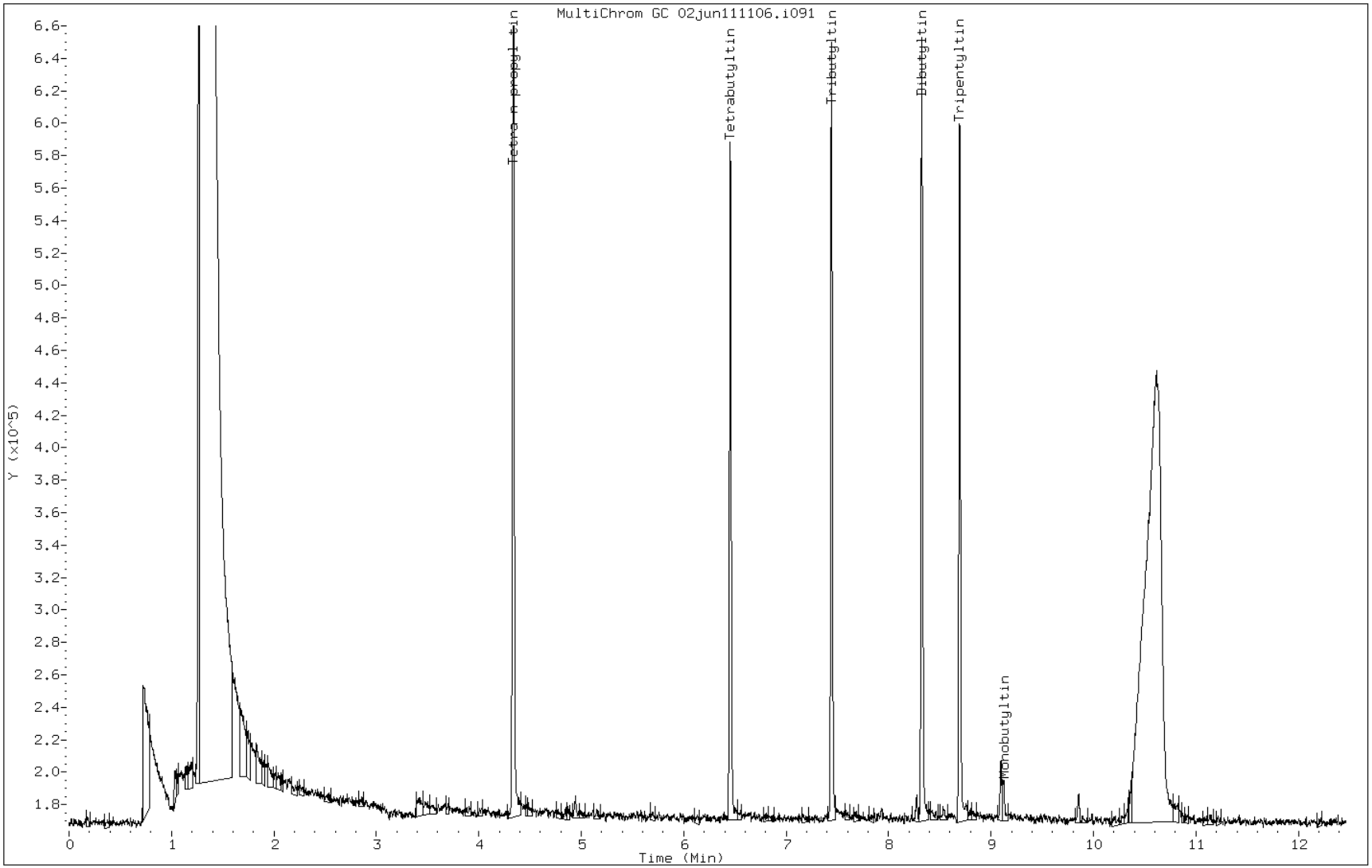
			CONCENTRATIONS ON-COL	FINAL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
4.338	4.300 (1.000)	811973	500.000	
2 Tetrabutyltin				CAS #: 1461-25-2
6.455	6.439 (1.488)	477237	389.085	389.1
3 Tributyltin				CAS #: 688-73-3
7.444	7.430 (1.716)	532457	336.673	336.7
4 Dibutyltin				CAS #: 1002-53-5
8.324	8.310 (1.919)	567778	302.598	302.6
$ 5 Tripentyltin				CAS #: 3342-67-4
8.694	8.683 (2.004)	527940	389.157	389.2

RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	
6 Monobutyltin				CAS #: 2406-65-7	
9.126	9.111 (2.104)	39106	20.0246	20.02	(aR)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File:	02jun111106-r091.d	Date:	02-JUN-2011 16:56
Client ID:	LCS 200-18670/2-A	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	LCS 200-18670/2-A		
Lab Sample ID:	LCS 200-18670/2-A		



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: Lab Sample ID: LCS 200-18879/2-A

Matrix: Solid Lab File ID: 02jun111106-r021.d

Analysis Method: Organotins/GC Date Collected:

Extraction Method: 3550B Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.00(g) Date Analyzed: 06/02/2011 14:58

Con. Extract Vol.: 1000(uL) Dilution Factor: 1

Injection Volume: 1.5(uL) GC Column: RTX-35 ID: 0.32(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1002-53-5	Dibutyltin	10.7		1.3	0.40
2406-65-7	Monobutyltin	5.0	U J	5.0	5.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	97		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_1.i/060211_1/02JUN111106.b/02jun111106-r021.d
Lab Smp Id: LCS 200-18879/2-A Client Smp ID: LCS 200-18879/2-A
Inj Date : 02-JUN-2011 14:58
Operator : WBR Inst ID: 2860_1.i
Smp Info : LCS 200-18879/2-A
Misc Info :
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

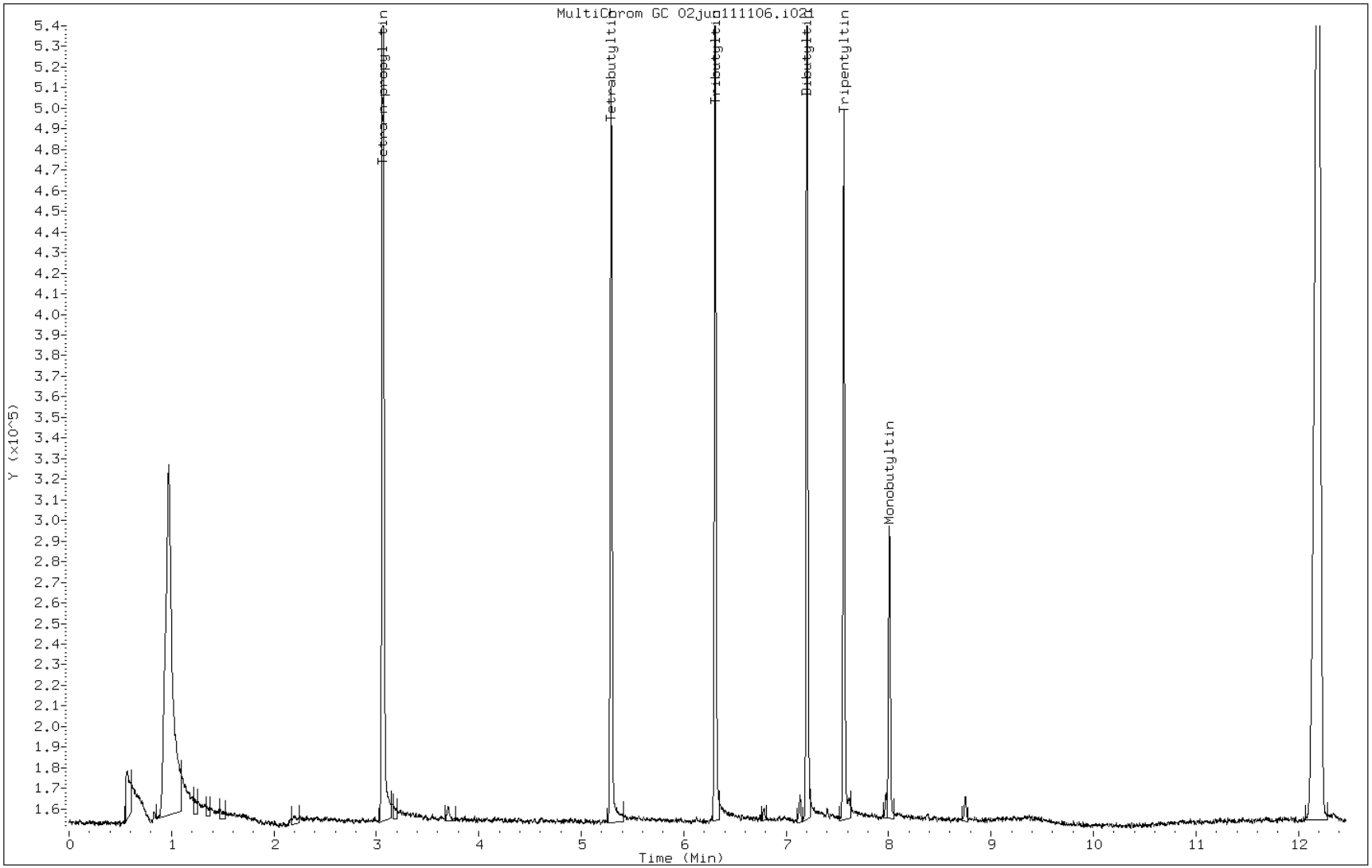
Cpnd Variable Local Compound Variable

		RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
*	1 Tetra-n-propyl tin					CAS #: 2176-98-9
		3.063	3.017 (1.000)	728797	500.000	
	2 Tetrabutyltin					CAS #: 1461-25-2
		5.291	5.276 (1.727)	469061	458.759	458.8
	3 Tributyltin					CAS #: 688-73-3
		6.309	6.295 (2.059)	539298	407.379	407.4
	4 Dibutyltin					CAS #: 1002-53-5
		7.202	7.191 (2.351)	522490	320.459	320.5
$	5 Tripentyltin					CAS #: 3342-67-4
		7.563	7.554 (2.469)	430975	438.081	438.1

RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
6 Monobutyltin				CAS #: 2406-65-7
8.009	7.996 (2.614)	177270	121.846	121.8

Data File: 02jun111106-r021.d
Client ID: LCS 200-18879/2-A
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: LCS 200-18879/2-A
Lab Sample ID: LCS 200-18879/2-A

Date: 02-JUN-2011 14:58
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: | Lab Sample ID: LCS 200-18879/2-A

Matrix: Solid | Lab File ID: 02jun111106-r021.d

Analysis Method: Organotins/GC | Date Collected:

Extraction Method: 3550B | Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.00(g) | Date Analyzed: 06/02/2011 14:58

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1.5(uL) | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	13.8		1.7	0.44
688-73-3	Tributyltin	13.4		1.5	0.67

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	96		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Data file : /var/chem/2860_2.i/060211_1/02JUN111106.b/02jun111106-r021.d
Lab Smp Id: LCS 200-18879/2-A Client Smp ID: LCS 200-18879/2-A
Inj Date : 02-JUN-2011 14:58
Operator : WBR Inst ID: 2860_2.i
Smp Info : LCS 200-18879/2-A
Misc Info :
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

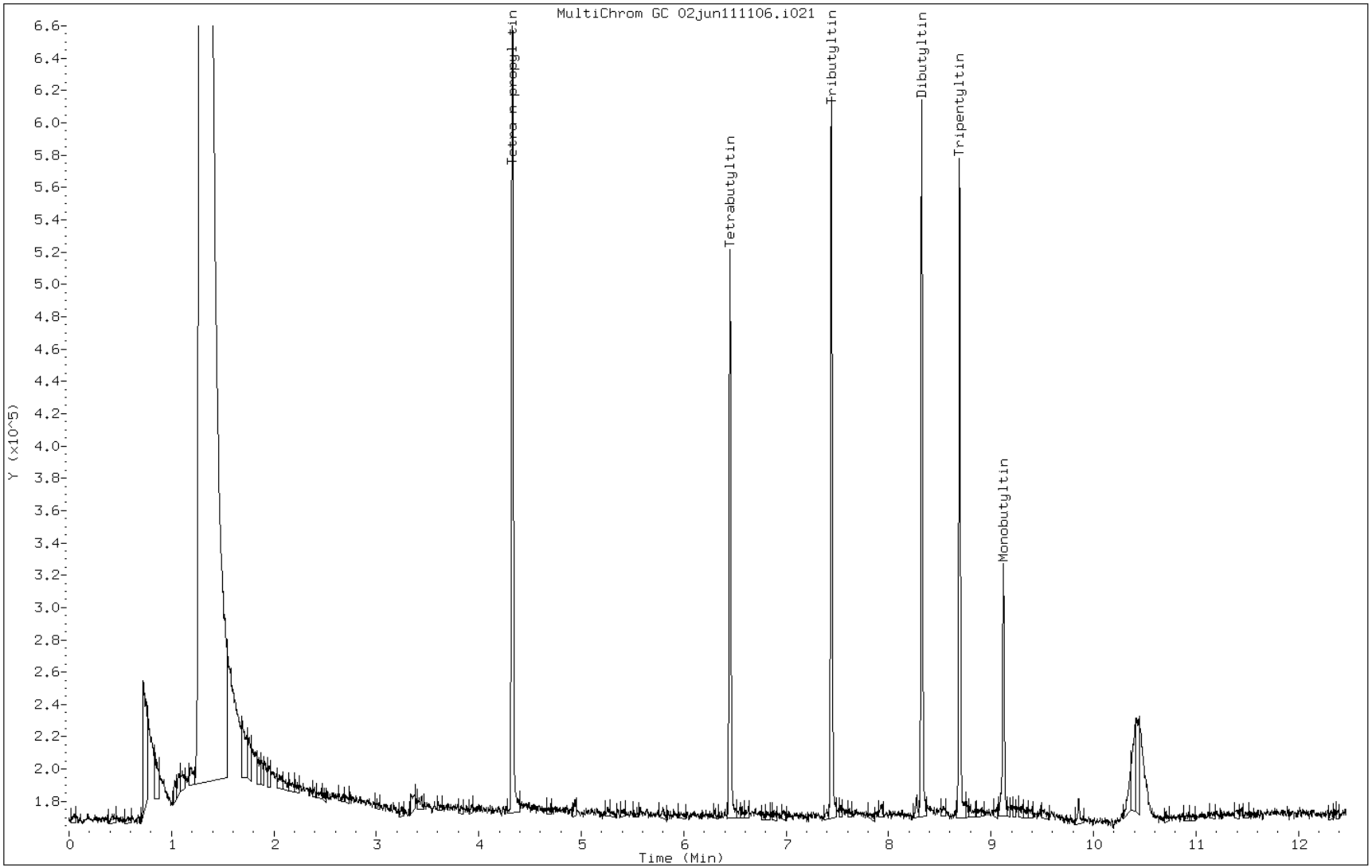
Cpnd Variable Local Compound Variable

			CONCENTRATIONS ON-COL	FINAL
RT	EXP RT (REL RT)	RESPONSE	(ug/L)	(ug/L)
* 1 Tetra-n-propyl tin				CAS #: 2176-98-9
4.327	4.300 (1.000)	665016	500.000	
2 Tetrabutyltin				CAS #: 1461-25-2
6.453	6.439 (1.491)	416932	415.035	415.0
3 Tributyltin				CAS #: 688-73-3
7.441	7.430 (1.720)	522555	403.427	403.4
4 Dibutyltin				CAS #: 1002-53-5
8.324	8.310 (1.924)	501234	326.165	326.2
$ 5 Tripentyltin				CAS #: 3342-67-4
8.694	8.683 (2.009)	481303	433.180	433.2

RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
6 Monobutyltin				CAS #: 2406-65-7
9.122	9.111 (2.108)	204093	127.602	127.6

Data File: 02jun111106-r021.d
Client ID: LCS 200-18879/2-A
Operator: WBR
Column Type:
Stationary Phase: RTX-5
Sample Info: LCS 200-18879/2-A
Lab Sample ID: LCS 200-18879/2-A

Date: 02-JUN-2011 14:58
Instrument: 2860_2.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: SED-035-SIV-SDMS MS | Lab Sample ID: 200-5311-1 MS

Matrix: Solid | Lab File ID: 02jun111106-r061.d

Analysis Method: Organotins/GC | Date Collected: 05/23/2011 15:00

Extraction Method: 3550B | Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.92(g) | Date Analyzed: 06/02/2011 16:06

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1.5(uL) | GC Column: RTX-35 ID: 0.32(mm)

% Moisture: 48.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
688-73-3	Tributyltin	26.5		2.8	1.3
1002-53-5	Dibutyltin	22.2		2.4	0.75
2406-65-7	Monobutyltin	9.3	U J	9.3	9.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	97		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1 MS
Client Smp ID: SED-035-SIV-SD
Inj Date : 02-JUN-2011 16:06
Operator : WBR Inst ID: 2860_1.i
Smp Info : 200-5311-A-1-D MS
Misc Info : 200-5311-A-1-D MS
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

			RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	
*	1	Tetra-n-propyl tin					CAS #: 2176-98-9	
			3.075	3.017 (0.000)	699316	500.000		(M)
	2	Tetrabutyltin					CAS #: 1461-25-2	
			5.302	5.276 (1.000)	453099	461.830	461.8	
	3	Tributyltin					CAS #: 688-73-3	
			6.320	6.295 (1.000)	540716	425.669	425.7	
	4	Dibutyltin					CAS #: 1002-53-5	
			7.215	7.191 (1.000)	556583	355.760	355.8	
$	5	Tripentyltin					CAS #: 3342-67-4	
			7.574	7.554 (1.000)	410828	435.206	435.2	

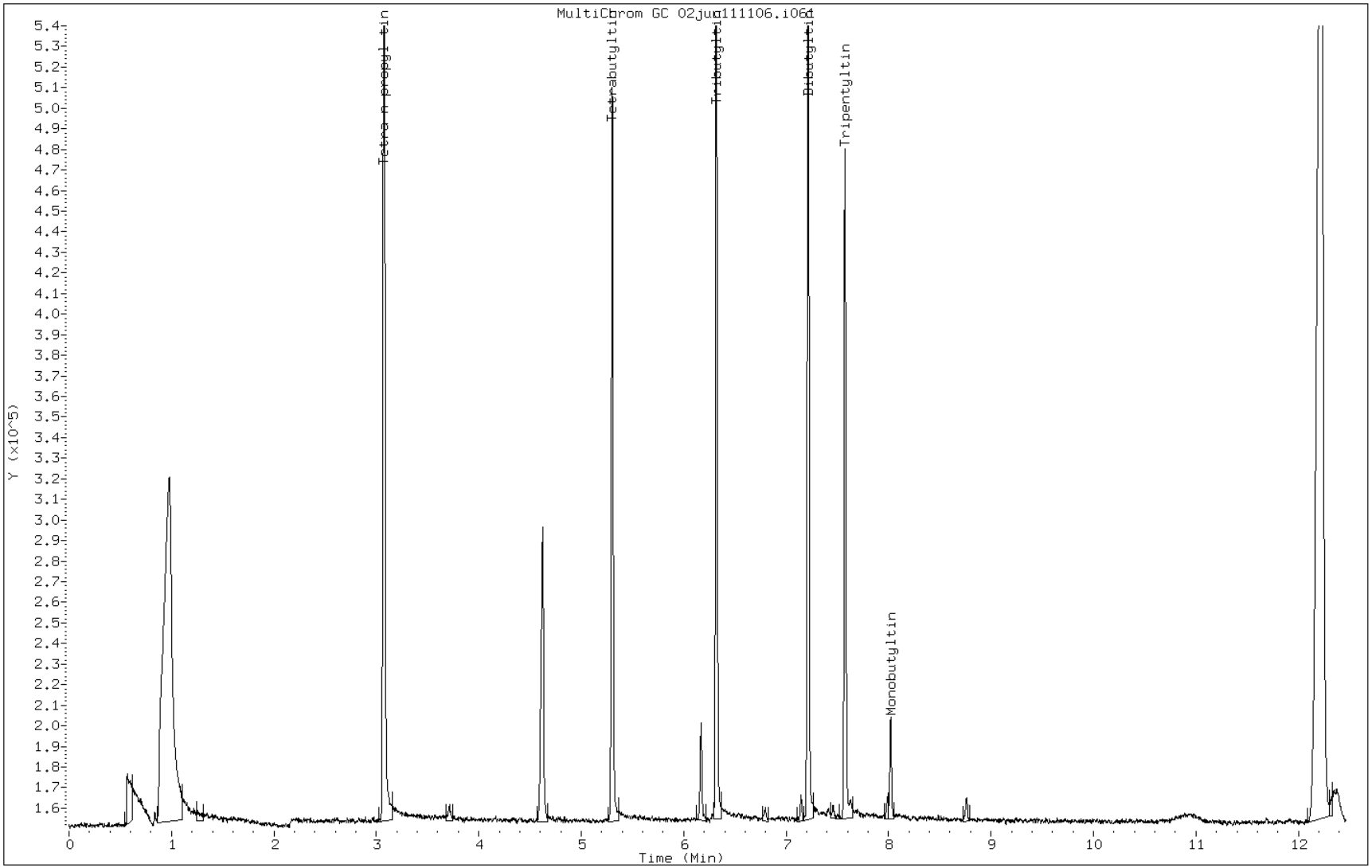
RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	
6 Monobutyltin				CAS #: 2406-65-7	
8.020	7.996 (1.000)	64527	46.2223	46.22	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: 02jun111106-r061.d
Client ID: SED-035-SIV-SD
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: 200-5311-A-1-D MS
Lab Sample ID: 200-5311-1 MS

Date: 02-JUN-2011 16:06
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



Manual Integration Report

Data File: 02jun111106-r061.d
Lab Sample ID: 200-5311-1 MS
Inj. Date and Time: 02-JUN-2011 16:06
Instrument ID: 2860_1.i
Client ID: SED-035-SIV-SD
Compound: 6 Monobutyltin
CAS #: 2406-65-7
Report Date: 06/06/2011

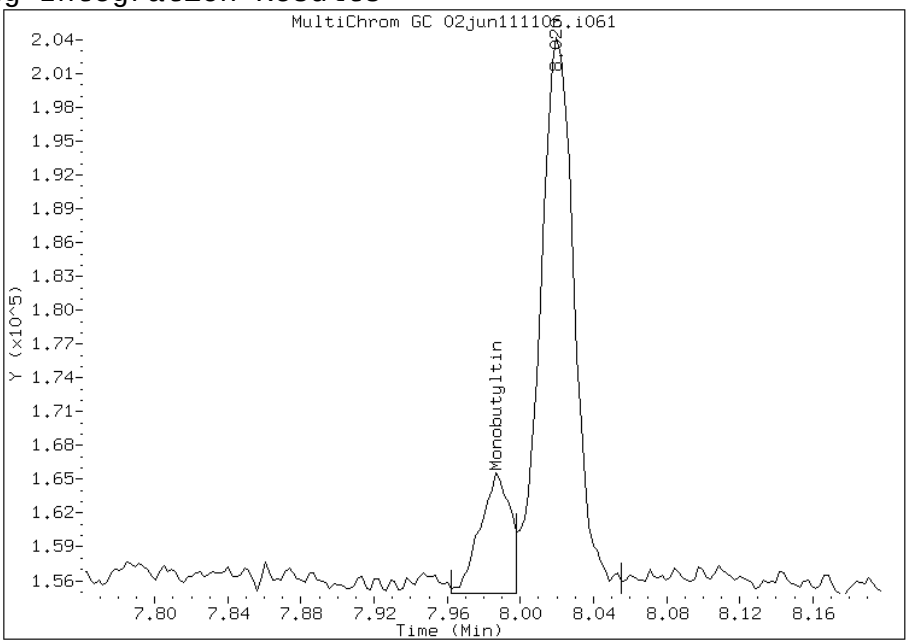
Processing Integration Results

RT: 7.99

Response: 12081

Amount: 0.000000

Conc: 0.000000



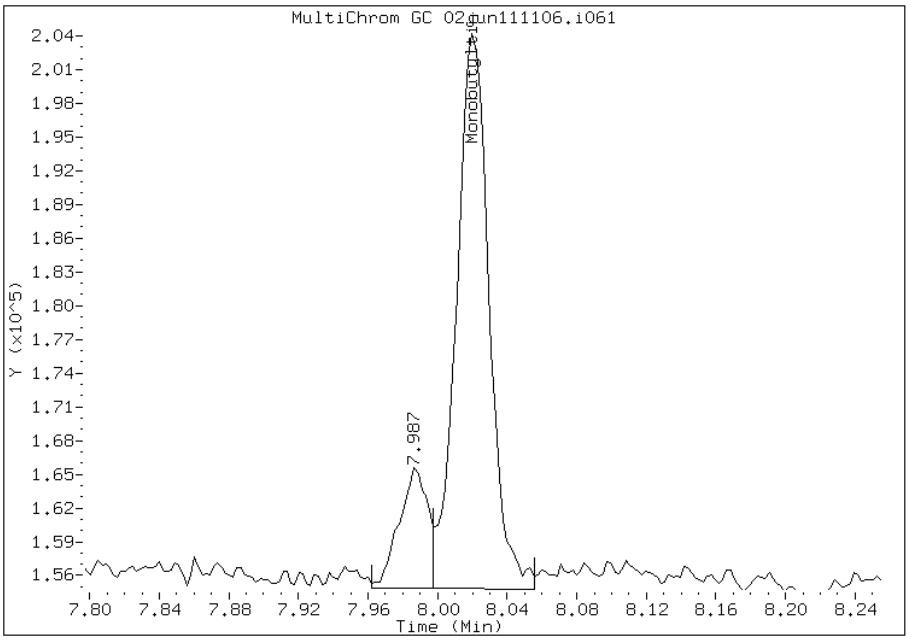
Manual Integration Results

RT: 8.02

Response: 64527

Amount: 46.22

Conc: 46.22



File Uploaded By: wbr
Manual Integration Reason: Unknown

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: SED-035-SIV-SDMS MS | Lab Sample ID: 200-5311-1 MS

Matrix: Solid | Lab File ID: 02jun111106-r061.d

Analysis Method: Organotins/GC | Date Collected: 05/23/2011 15:00

Extraction Method: 3550B | Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.92(g) | Date Analyzed: 06/02/2011 16:06

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1.5(uL) | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: 48.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	27.5		3.2	0.82

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	90		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1 MS
Client Smp ID: SED-035-SIV-SD
Inj Date : 02-JUN-2011 16:06
Operator : WBR Inst ID: 2860_2.i
Smp Info : 200-5311-A-1-D MS
Misc Info : 200-5311-A-1-D MS
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

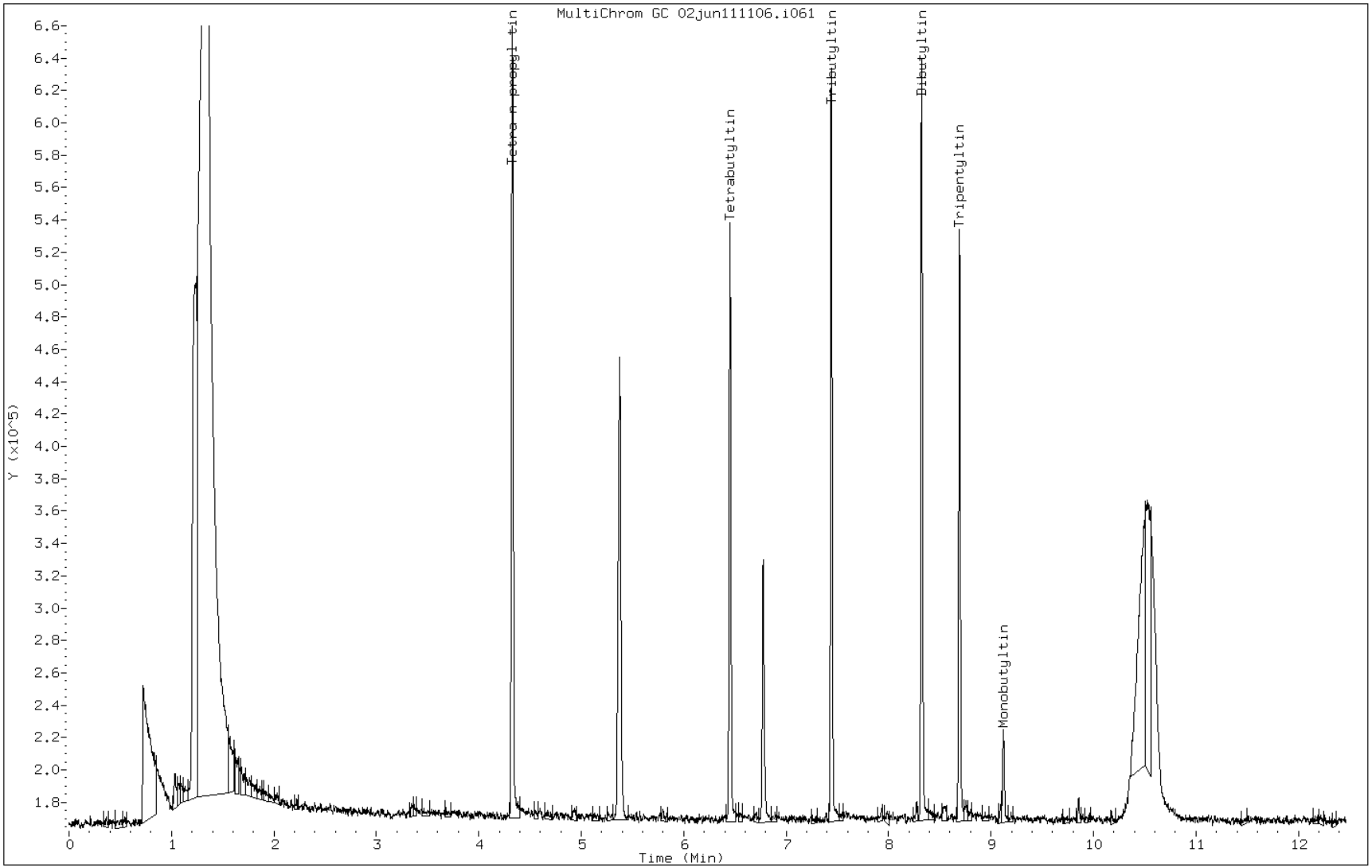
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
*	1 Tetra-n-propyl tin				CAS #: 2176-98-9
	4.327	4.300 (1.000)	640153	500.000	
	2 Tetrabutyltin				CAS #: 1461-25-2
	6.453	6.439 (1.491)	427565	442.150	442.2
	3 Tributyltin				CAS #: 688-73-3
	7.441	7.430 (1.720)	535508	429.484	429.5
	4 Dibutyltin				CAS #: 1002-53-5
	8.324	8.310 (1.924)	542208	366.531	366.5
$	5 Tripentyltin				CAS #: 3342-67-4
	8.692	8.683 (2.009)	434193	405.958	406.0

RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
6 Monobutyltin				CAS #: 2406-65-7
9.119	9.111 (2.108)	73137	47.5023	47.50

Data File:	02jun111106-r061.d	Date:	02-JUN-2011 16:06
Client ID:	SED-035-SIV-SD	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	200-5311-A-1-D MS		
Lab Sample ID:	200-5311-1 MS		



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: SED-035-SIV-SDMS MSD | Lab Sample ID: 200-5311-1 MSD

Matrix: Solid | Lab File ID: 02jun111106-r071.d

Analysis Method: Organotins/GC | Date Collected: 05/23/2011 15:00

Extraction Method: 3550B | Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.56(g) | Date Analyzed: 06/02/2011 16:23

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1.5(uL) | GC Column: RTX-35 ID: 0.32(mm)

% Moisture: 48.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
688-73-3	Tributyltin	27.0		2.8	1.3
1002-53-5	Dibutyltin	22.7		2.5	0.76
2406-65-7	Monobutyltin	9.5	U J	9.5	9.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	107		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1 MSD
Client Smp ID: SED-035-SIV-SD
Inj Date : 02-JUN-2011 16:23
Operator : WBR Inst ID: 2860_1.i
Smp Info : 200-5311-A-1-C MSD
Misc Info : 200-5311-A-1-C MSD
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

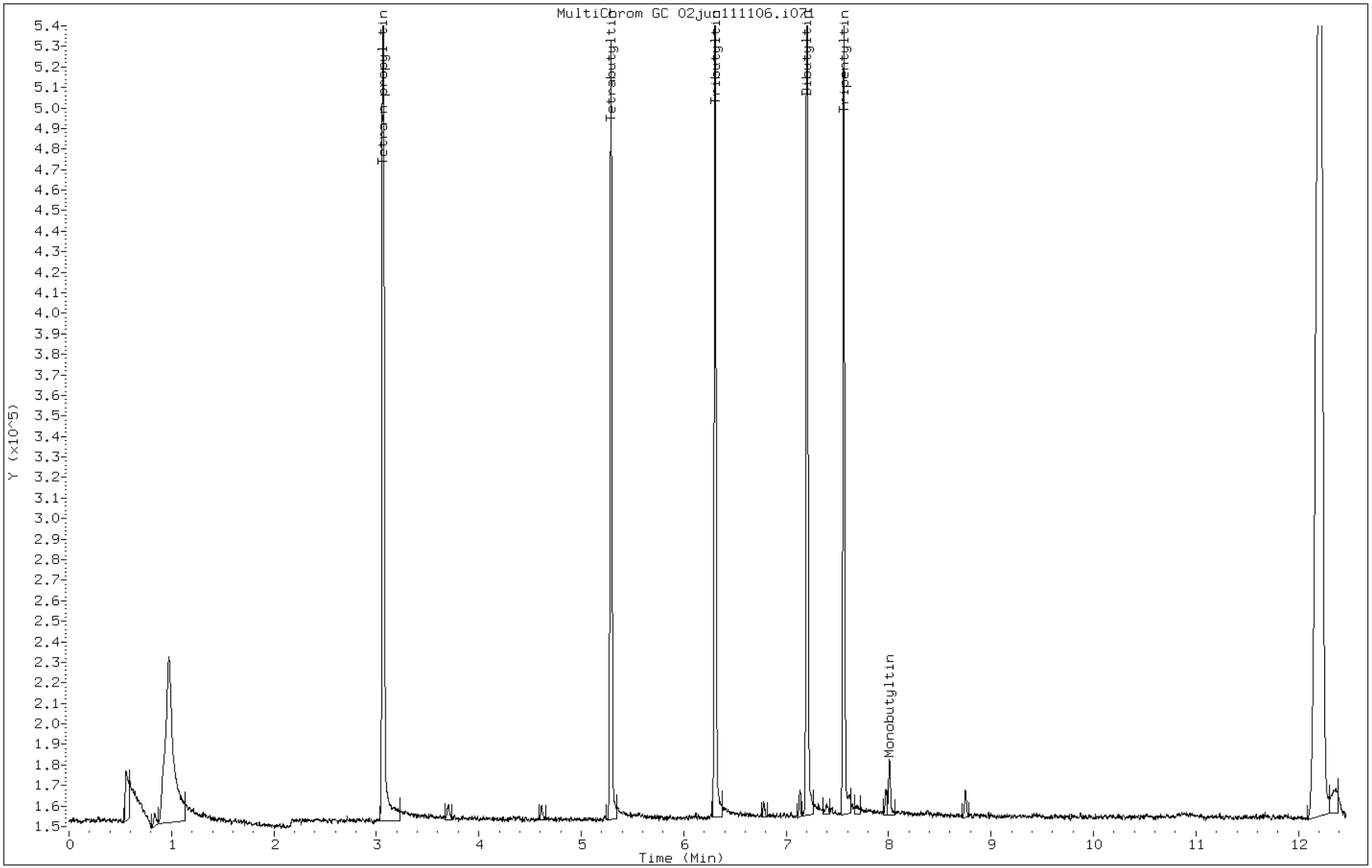
	RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
*	1 Tetra-n-propyl tin				CAS #: 2176-98-9
	3.066	3.017 (1.000)	748605	500.000	
	2 Tetrabutyltin				CAS #: 1461-25-2
	5.289	5.276 (1.725)	473365	450.719	450.7
	3 Tributyltin				CAS #: 688-73-3
	6.306	6.295 (2.057)	583337	428.986	429.0
	4 Dibutyltin				CAS #: 1002-53-5
	7.202	7.191 (2.349)	603106	360.115	360.1
$	5 Tripentyltin				CAS #: 3342-67-4
	7.563	7.554 (2.467)	485466	480.413	480.4

RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	
6 Monobutyltin				CAS #: 2406-65-7	
8.009	7.996 (2.612)	36624	24.5074	24.51	(aR)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File:	02jun111106-r071.d	Date:	02-JUN-2011 16:23
Client ID:	SED-035-SIV-SD	Instrument:	2860_1.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-35		
Sample Info:	200-5311-A-1-C MSD		
Lab Sample ID:	200-5311-1 MSD		



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: SED-035-SIV-SDMS MSD | Lab Sample ID: 200-5311-1 MSD

Matrix: Solid | Lab File ID: 02jun111106-r071.d

Analysis Method: Organotins/GC | Date Collected: 05/23/2011 15:00

Extraction Method: 3550B | Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.56(g) | Date Analyzed: 06/02/2011 16:23

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1.5(uL) | GC Column: RTX-5 ID: 0.32(mm)

% Moisture: 48.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	28.4		3.2	0.83

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	109		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1 MSD
Client Smp ID: SED-035-SIV-SD
Inj Date : 02-JUN-2011 16:23
Operator : WBR Inst ID: 2860_2.i
Smp Info : 200-5311-A-1-C MSD
Misc Info : 200-5311-A-1-C MSD
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

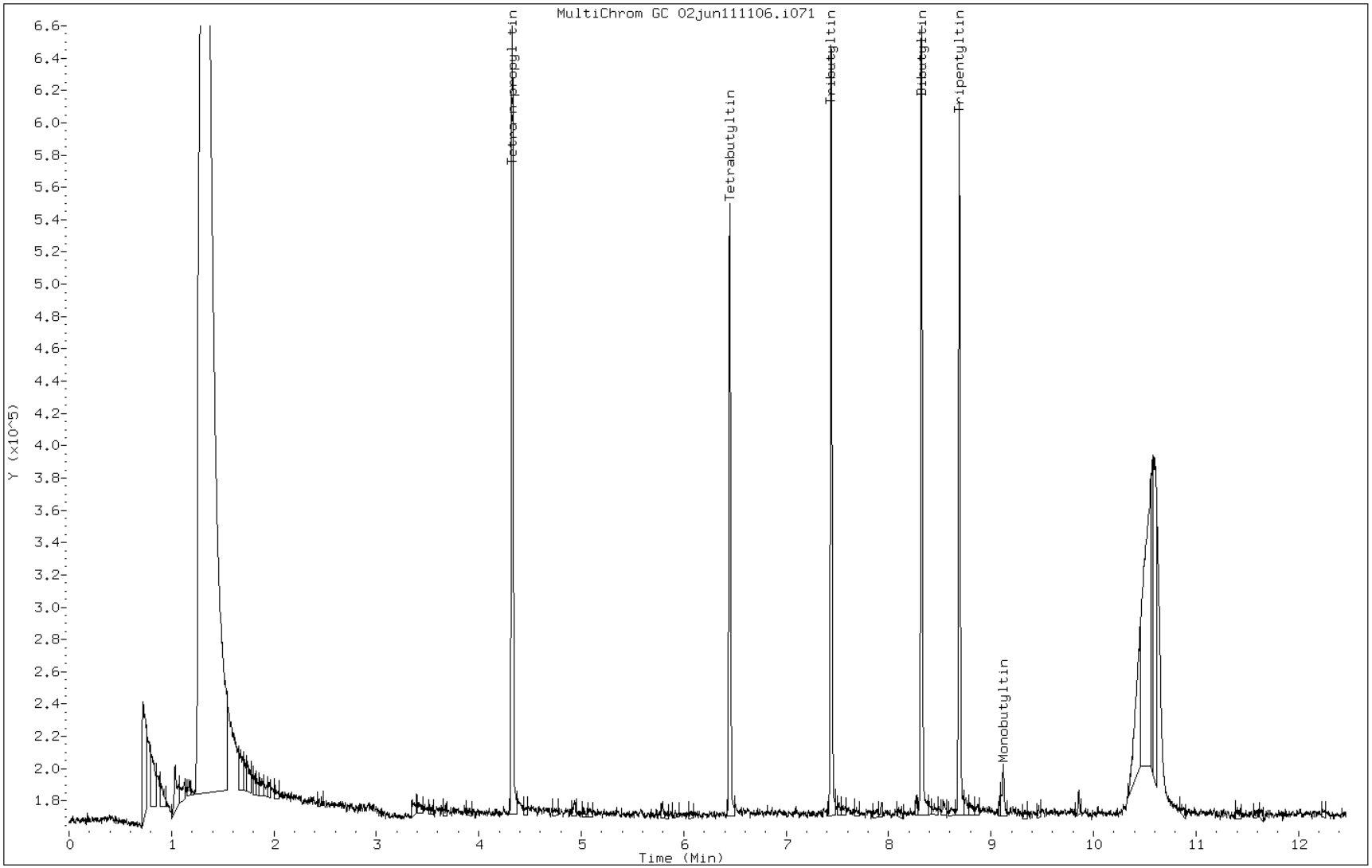
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
*	1 Tetra-n-propyl tin				CAS #: 2176-98-9
	4.327	4.300 (1.000)	645270	500.000	
	2 Tetrabutyltin				CAS #: 1461-25-2
	6.450	6.439 (1.491)	438748	450.117	450.1
	3 Tributyltin				CAS #: 688-73-3
	7.439	7.430 (1.719)	553035	440.024	440.0
	4 Dibutyltin				CAS #: 1002-53-5
	8.321	8.310 (1.923)	581159	389.747	389.7
$	5 Tripentyltin				CAS #: 3342-67-4
	8.692	8.683 (2.009)	529582	491.217	491.2

RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
6 Monobutyltin				CAS #: 2406-65-7
9.119	9.111 (2.108)	50558	32.5769	32.58

Data File:	02jun111106-r071.d	Date:	02-JUN-2011 16:23
Client ID:	SED-035-SIV-SD	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	200-5311-A-1-C MSD		
Lab Sample ID:	200-5311-1 MSD		



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington | Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: SED-035-SIV-SDMS DU | Lab Sample ID: 200-5311-1 DU

Matrix: Solid | Lab File ID: 02jun111106-r041.d

Analysis Method: Organotins/GC | Date Collected: 05/23/2011 15:00

Extraction Method: 3550B | Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.20(g) | Date Analyzed: 06/02/2011 15:32

Con. Extract Vol.: 1000(uL) | Dilution Factor: 1

Injection Volume: 1.5(uL) | GC Column: RTX-35 ID: 0.32(mm)

% Moisture: 45.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1461-25-2	Tetrabutyltin	3.1	U	3.1	0.80
688-73-3	Tributyltin	2.7	U	2.7	1.2
1002-53-5	Dibutyltin	2.4	U	2.4	0.73
2406-65-7	Monobutyltin	9.1	U J	9.1	9.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	103		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1 DU
Client Smp ID: SED-035-SIV-SDMS
Inj Date : 02-JUN-2011 15:32
Operator : WBR Inst ID: 2860_1.i
Smp Info : 200-5311-A-1-B DU
Misc Info : 200-5311-A-1-B DU
Comment :
Method : /var/chem/2860_1.i/060211_1/02JUN111106.b/OR560_RTX35.m
Meth Date : 03-Jun-2011 12:51 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

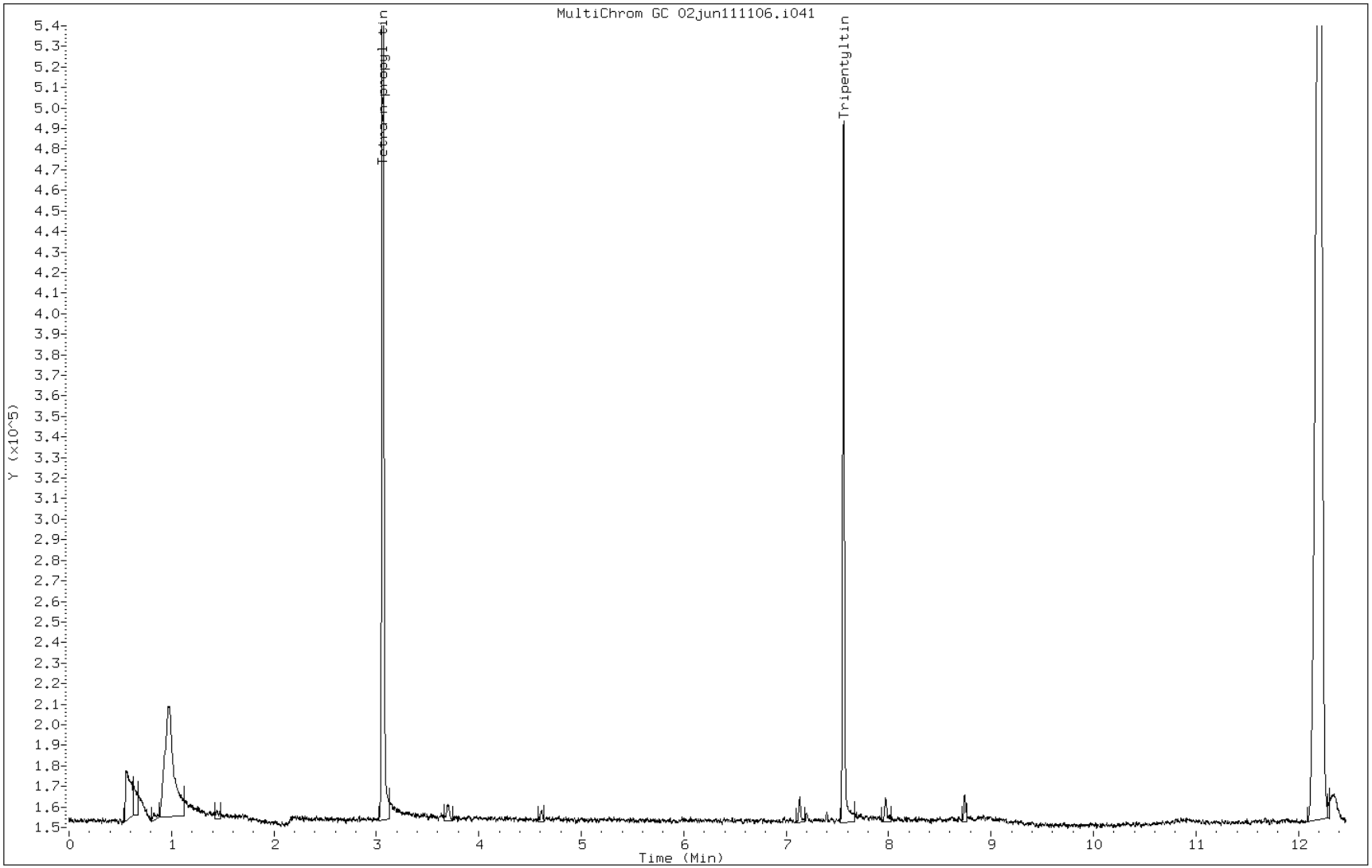
Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
*	1 Tetra-n-propyl tin				CAS #: 2176-98-9
	3.063	3.017 (1.000)	706581	500.000	
$	5 Tripentyltin				CAS #: 3342-67-4
	7.561	7.554 (2.468)	440301	461.633	461.6

Data File: 02jun111106-r041.d
Client ID: SED-035-SIV-SDMS
Operator: WBR
Column Type:
Stationary Phase: RTX-35
Sample Info: 200-5311-A-1-B DU
Lab Sample ID: 200-5311-1 DU

Date: 02-JUN-2011 15:32
Instrument: 2860_1.i
Inj Vol: 1.5
Diameter: 0.32



FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Client Sample ID: SED-035-SIV-SDMS DU Lab Sample ID: 200-5311-1 DU

Matrix: Solid Lab File ID: 02jun111106-r041.d

Analysis Method: Organotins/GC Date Collected: 05/23/2011 15:00

Extraction Method: 3550B Date Extracted: 06/01/2011 17:38

Sample wt/vol: 30.20(g) Date Analyzed: 06/02/2011 15:32

Con. Extract Vol.: 1000(uL) Dilution Factor: 1

Injection Volume: 1.5(uL) GC Column: RTX-5 ID: 0.32(mm)

% Moisture: 45.6 GPC Cleanup:(Y/N) N

Analysis Batch No.: 19104 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
STL00386	Tripentyltin	95		30-120

TestAmerica Burlington

Alkyl Tin Quantitation Report

Lab Sample Id: 200-5311-1 DU
Client Smp ID: SED-035-SIV-SDMS
Inj Date : 02-JUN-2011 15:32
Operator : WBR Inst ID: 2860_2.i
Smp Info : 200-5311-A-1-B DU
Misc Info : 200-5311-A-1-B DU
Comment :
Method : /var/chem/2860_2.i/060211_1/02JUN111106.b/OR560_RTX5.m
Meth Date : 03-Jun-2011 13:40 wbr Quant Type: ISTD
Cal Date : 02-JUN-2011 13:50 Cal File: 02jun110958-r071.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: SOIL
Processing Host: chemsvr5

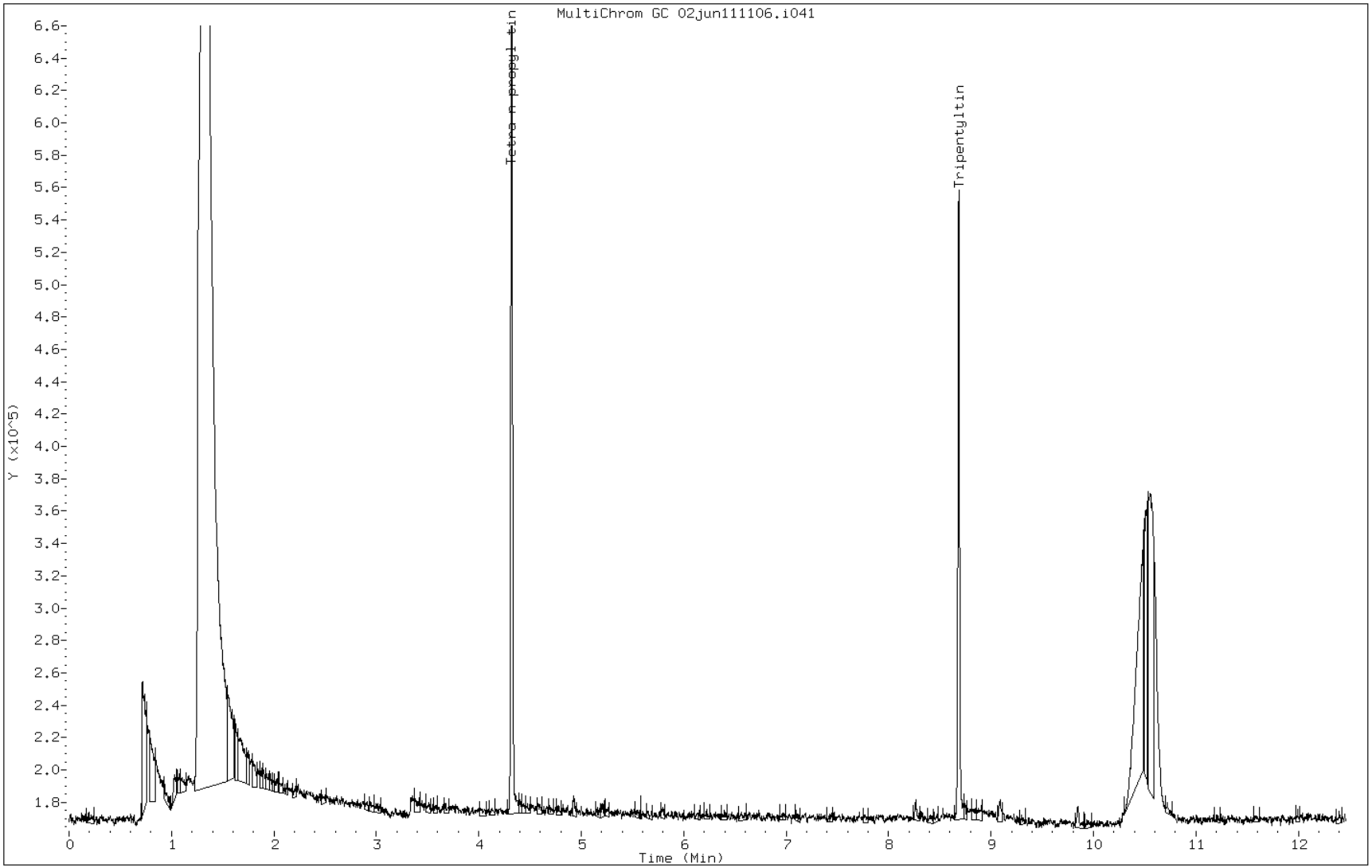
Concentration Formula: Amt * DF * Vi/Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vi	1.50000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT (REL RT)	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)
*	1 Tetra-n-propyl tin				CAS #: 2176-98-9
	4.320	4.300 (1.000)	652805	500.000	
$	5 Tripentyltin				CAS #: 3342-67-4
	8.685	8.683 (2.010)	468704	429.731	429.7

Data File:	02jun111106-r041.d	Date:	02-JUN-2011 15:32
Client ID:	SED-035-SIV-SDMS	Instrument:	2860_2.i
Operator:	WBR	Inj Vol:	1.5
Column Type:		Diameter:	0.32
Stationary Phase:	RTX-5		
Sample Info:	200-5311-A-1-B DU		
Lab Sample ID:	200-5311-1 DU		



GC INSTRUMENT RUN LOG (+) TEA

Date: 06/02/11	Target Directory: 0602H-1	Instrument ID: HP2860 CH: 37 & 38	Report Information:
Analyst: WBR	Test Method: ORS60	Column Type: Column: RTX-35, RTX-5 ISTD: 10 uL → 100 uL Extract	ised ~~152818~~ WBR 6/6/11 152814
Project(s): 060111-1	ICAL Date: 06/02/11	Column Type: Column: RTX-35, RTX-OPP2 ISTD: 5 uL → 100 uL Extract	
		Injection Volume **Injection Volume:** 3 uL	

Inj. #	Lab ID	BC	Filename / Batch	ETR / SDG	Matrix	DF	QC	Analyst	Comments / Standard Traceability
1	Blank	NA	02JUN110958	–	NA	1.0	–	–	TALS Batch 19102
2	Blank			–			–	–	CALid 7089 / 7090
3	IC-131787			50ppb			✓✓	WBR	
4	IC-131788			100ppb			✓✓		
5	ICRT-131789			250ppb			✓✓		
6	IC-131790			500ppb			✓✓		ch37 (540000) ch38 (660000)
7	IC-131791			1000ppb			✓✓		
8	Blank			—			–	–	
9	ICV-131792			ICV			✓✓	WBR	
10	MB 200 18879	1-A	02JUN111106		S	1.0	✓✓		
11	LCS 200 18878	2-A					✓✓		
12	200 5311 A 1 A			JOB 5311			✓✓		
13	200 5311 A 1 B	DU					✓✓		* All monobutyltin "J" flagged in samples & QC
14	200 5311 A 2 A						✓✓		* UJ
15	200 5311 A 1 D	MS					✓✓		
16	200 5311 A 1 C	MSD			S		✓✓		
17	MB 200 18670	1-A			W		✓✓		
18	LCS 200 18670	2-A					✓✓		
19	200-5311-A3	A		5311			✓✓		
20	CCV-131789	–		–	–	–	✓	WBR	OK
21	200-5322-A1	A		5322	W	1.0	✓		(TBT only)
22	CCV-131789	–		–	–	–	✓	WBR	OK

WBR 6/3/11

Legend: DF= Dilution Factor; RE=Reanalyze; ✓ = Reviewed and Acceptable; X = Not Acceptable; — = Not Applicable; W = Water; S = Soil; SD = Sediment; T = Tissue; BC= Bottle Code

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Instrument ID: 2860.i Start Date: 06/02/2011 12:42

Analysis Batch Number: 19102 End Date: 06/02/2011 14:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 200-19102/1		06/02/2011 12:42	1	02jun110958-r031.d	RTX-35 0.32(mm)
IC 200-19102/1		06/02/2011 12:42	1	02jun110958-r031.d	RTX-5 0.32(mm)
IC 200-19102/2		06/02/2011 12:59	1	02jun110958-r041.d	RTX-35 0.32(mm)
IC 200-19102/2		06/02/2011 12:59	1	02jun110958-r041.d	RTX-5 0.32(mm)
ICRT 200-19102/3		06/02/2011 13:16	1	02jun110958-r051.d	RTX-35 0.32(mm)
ICRT 200-19102/3		06/02/2011 13:16	1	02jun110958-r051.d	RTX-5 0.32(mm)
IC 200-19102/4		06/02/2011 13:33	1	02jun110958-r061.d	RTX-35 0.32(mm)
IC 200-19102/4		06/02/2011 13:33	1	02jun110958-r061.d	RTX-5 0.32(mm)
IC 200-19102/5		06/02/2011 13:50	1	02jun110958-r071.d	RTX-35 0.32(mm)
IC 200-19102/5		06/02/2011 13:50	1	02jun110958-r071.d	RTX-5 0.32(mm)
ICV 200-19102/6		06/02/2011 14:24	1	02jun110958-r091.d	RTX-35 0.32(mm)
ICV 200-19102/6		06/02/2011 14:24	1	02jun110958-r091.d	RTX-5 0.32(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Instrument ID: 2860.i Start Date: 06/02/2011 14:41

Analysis Batch Number: 19104 End Date: 06/02/2011 18:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
MB 200-18879/1-A		06/02/2011 14:41	1	02jun111106-r01 1.d	RTX-35 0.32(mm)
MB 200-18879/1-A		06/02/2011 14:41	1	02jun111106-r01 1.d	RTX-5 0.32(mm)
LCS 200-18879/2-A		06/02/2011 14:58	1	02jun111106-r02 1.d	RTX-35 0.32(mm)
LCS 200-18879/2-A		06/02/2011 14:58	1	02jun111106-r02 1.d	RTX-5 0.32(mm)
200-5311-1	SED-035-SIV-SDMS	06/02/2011 15:15	1	02jun111106-r03 1.d	RTX-35 0.32(mm)
200-5311-1	SED-035-SIV-SDMS	06/02/2011 15:15	1	02jun111106-r03 1.d	RTX-5 0.32(mm)
200-5311-1 DU	SED-035-SIV-SDMS DU	06/02/2011 15:32	1	02jun111106-r04 1.d	RTX-35 0.32(mm)
200-5311-1 DU	SED-035-SIV-SDMS DU	06/02/2011 15:32	1	02jun111106-r04 1.d	RTX-5 0.32(mm)
200-5311-2	DUP03-SIV-QC-052311	06/02/2011 15:49	1	02jun111106-r05 1.d	RTX-35 0.32(mm)
200-5311-2	DUP03-SIV-QC-052311	06/02/2011 15:49	1	02jun111106-r05 1.d	RTX-5 0.32(mm)
200-5311-1 MS	SED-035-SIV-SDMS MS	06/02/2011 16:06	1	02jun111106-r06 1.d	RTX-35 0.32(mm)
200-5311-1 MS	SED-035-SIV-SDMS MS	06/02/2011 16:06	1	02jun111106-r06 1.d	RTX-5 0.32(mm)
200-5311-1 MSD	SED-035-SIV-SDMS MSD	06/02/2011 16:23	1	02jun111106-r07 1.d	RTX-35 0.32(mm)
200-5311-1 MSD	SED-035-SIV-SDMS MSD	06/02/2011 16:23	1	02jun111106-r07 1.d	RTX-5 0.32(mm)
MB 200-18670/1-A		06/02/2011 16:40	1	02jun111106-r08 1.d	RTX-35 0.32(mm)
MB 200-18670/1-A		06/02/2011 16:40	1	02jun111106-r08 1.d	RTX-5 0.32(mm)
LCS 200-18670/2-A		06/02/2011 16:56	1	02jun111106-r09 1.d	RTX-35 0.32(mm)
LCS 200-18670/2-A		06/02/2011 16:56	1	02jun111106-r09 1.d	RTX-5 0.32(mm)
200-5311-3	FB08-SIV-052311	06/02/2011 17:13	1	02jun111106-r10 1.d	RTX-35 0.32(mm)
200-5311-3	FB08-SIV-052311	06/02/2011 17:13	1	02jun111106-r10 1.d	RTX-5 0.32(mm)
CCV 200-19104/11		06/02/2011 17:30	1	02jun111106-r11 1.d	RTX-35 0.32(mm)
CCV 200-19104/11		06/02/2011 17:30	1	02jun111106-r11 1.d	RTX-5 0.32(mm)
ZZZZZ		06/02/2011 17:47	1		RTX-35 0.32(mm)
ZZZZZ		06/02/2011 17:47	1		RTX-5 0.32(mm)
CCV 200-19104/13		06/02/2011 18:04	1		RTX-35 0.32(mm)
CCV 200-19104/13		06/02/2011 18:04	1		RTX-5 0.32(mm)

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Batch Number: 18670 Batch Start Date: 05/26/11 20:40 Batch Analyst: Fodge, John F

Batch Method: 3510C Batch End Date: 05/31/11 21:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	InitialAmount	FinalAmount	FirstAdjustpH	EXHexMagBr 00002	EXTinMTXSPi 00006
MB 200-18670/1		3510C, Organotins/GC		7	1000 mL	1000 uL	<2	0.8 mL	
LCS 200-18670/2		3510C, Organotins/GC		7	1000 mL	1000 uL	<2	0.8 mL	0.5 mL
200-5311-A-3	FB08-SIV-052311	3510C, Organotins/GC	T	7	1040 mL	1000 uL	<2	0.8 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXTINSUi 00007	EXTriethylami 00004				
MB 200-18670/1		3510C, Organotins/GC		0.5 mL	150 uL				
LCS 200-18670/2		3510C, Organotins/GC		0.5 mL	150 uL				
200-5311-A-3	FB08-SIV-052311	3510C, Organotins/GC	T	0.5 mL	150 uL				

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Batch Number: 18670 Batch Start Date: 05/26/11 20:40 Batch Analyst: Fodge, John F

Batch Method: 3510C Batch End Date: 05/31/11 21:45

Batch Notes	
Acid used for pH adjustment	HCL
Acid used for pH adjust Lot #	127224
Batch Comment	Batch derivitized on 5/31/11 by DI; 1:1 HCl:H20 Lot# 127225
Concentration End Time	2245
Concentration Start Time	2120
Person's name who did the concentration	JFF/DI
Final Concentrator Volume	1.0 mL
Florisil Lot #	Tin Cartride Lot# 25410
Na2SO4 Lot Number	145544
Prep Solvent Lot #	143457 / 109081
Prep Solvent Name	0.05% Tropolone / Hexane
Prep Solvent Volume Used	180 mL
Person's name who did the prep	JFF
Person's name who witnessed reagent drop	TPB
Sufficient volume for MS/MSD?	No

Basis	Basis Description
T	Total/NA

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Batch Number: 18879 Batch Start Date: 06/01/11 17:38 Batch Analyst: Bourdeau, Timothy P

Batch Method: 3550B Batch End Date: 06/01/11 22:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Copper_S 00022	ex50%HCli 00008	EXHexMagBr 00002	EXTinMTXSPi 00006
MB 200-18879/1		3550B, Organotins/GC		30.00 g	1000 uL	3 g	10 mL	800 uL	
LCS 200-18879/2		3550B, Organotins/GC		30.00 g	1000 uL	3 g	10 mL	800 uL	0.5 mL
200-5311-A-1	SED-035-SIV-SDMS	3550B, Organotins/GC	T	30.26 g	1000 uL	6 g	10 mL	800 uL	
200-5311-A-1 DU	SED-035-SIV-SDMS	3550B, Organotins/GC	T	30.20 g	1000 uL	6 g	10 mL	800 uL	
200-5311-A-1 MSD	SED-035-SIV-SDMS	3550B, Organotins/GC	T	30.56 g	1000 uL	6 g	10 mL	800 uL	0.5 mL
200-5311-A-1 MS	SED-035-SIV-SDMS	3550B, Organotins/GC	T	30.92 g	1000 uL	6 g	10 mL	800 uL	0.5 mL
200-5311-A-2	DUP03-SIV-QC-052311	3550B, Organotins/GC	T	30.78 g	1000 uL	6 g	10 mL	800 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXTINSUi 00007	EXTriethylami 00004	AnalysisComment			
MB 200-18879/1		3550B, Organotins/GC		0.5 mL	150 uL				
LCS 200-18879/2		3550B, Organotins/GC		0.5 mL	150 uL				
200-5311-A-1	SED-035-SIV-SDMS	3550B, Organotins/GC	T	0.5 mL	150 uL	Sample copper cleaned twice.			
200-5311-A-1 DU	SED-035-SIV-SDMS	3550B, Organotins/GC	T	0.5 mL	150 uL	Sample copper cleaned twice.			
200-5311-A-1 MSD	SED-035-SIV-SDMS	3550B, Organotins/GC	T	0.5 mL	150 uL	Sample copper cleaned twice.			
200-5311-A-1 MS	SED-035-SIV-SDMS	3550B, Organotins/GC	T	0.5 mL	150 uL	Sample copper cleaned twice.			

GC SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Batch Number: 18879 Batch Start Date: 06/01/11 17:38 Batch Analyst: Bourdeau, Timothy P

Batch Method: 3550B Batch End Date: 06/01/11 22:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXTINSUi 00007	EXTriethylami 00004	AnalysisComment			
200-5311-A-2	DUP03-SIV-QC-052311	3550B, Organotins/GC	T	0.5 mL	150 uL	Sample copper cleaned twice.			

Batch Notes	
Batch Comment	Tin Catridge lot# 25410
Concentration End Time	22:35
Concentration Start Time	22:00
Person's name who did the concentration	TPB
Copper Lot #	146086
Exchange Solvent Lot #	138283
Exchange Solvent Name	Hexane
Final Concentrator Volume	1.0 mL
Na2SO4 Lot Number	145546
Nominal Amount Used	30 g
Prep Solvent Lot #	138283/144134
Prep Solvent Name	Hexane/Tropolone
Prep Solvent Volume Used	300 mL
Person's name who witnessed reagent drop	JFF
Vendor of Reagent used	JT Baker

Basis	Basis Description
T	Total/NA

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Burlington Job Number: 200-5311-1

SDG No.: 5311

Project: CDM Organotin Project

Client Sample ID	Lab Sample ID
SED-035-SIV-SDMS	200-5311-1
DUP03-SIV-QC-052311	200-5311-2

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Burlington Job Number: 200-5311-1

SDG Number: 5311

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 04/01/2009 07:55

Analyte	Wavelength/ Mass	RL (%)	
Percent Solids		0.1	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Instrument ID: NOEQUIP Method: Moisture

Start Date: 05/25/2011 14:02 End Date: 05/25/2011 14:02

Lab Sample ID	D / F	Type	Time	Analytes																			
				% Sol																			
200-5311-1	1	T	14:02	X																			
200-5311-1 DU	1	T	14:02	X																			
200-5311-2	1	T	14:02	X																			

Prep Types
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Burlington Job No.: 200-5311-1

SDG No.: 5311

Batch Number: 18581 Batch Start Date: 05/25/11 14:02 Batch Analyst: Nelson, Andrea J

Batch Method: Moisture Batch End Date: 05/26/11 08:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
200-5311-A-1	SED-035-SIV-SDMS	Moisture	T	1	1.01 g	10.04 g	5.70 g		
200-5311-A-1 DU	SED-035-SIV-SDMS	Moisture	T	2	1.00 g	10.40 g	6.11 g		
200-5311-A-2	DUP03-SIV-QC-052311	Moisture	T	3	1.01 g	10.20 g	5.98 g		

Batch Notes	
Balance ID	M78711 No Unit
Date samples were place in the oven	05/25/2011
Oven Temp when samples are put in oven	106 Degrees C
Time samples were place in the oven	1411
Date samples were removed from oven	05/26/2011
Oven Temp when samples removed from oven	106 Degrees C
Time Samples were removed from oven	0822
Oven ID	2
ID number of the thermometer	140

Basis	Basis Description
T	Total/NA

Shipping and Receiving Documents

FedEx

ORIGIN ID: LNSA (717) 656-2300
SHIPPING DEPARTMENT
LANCASTER LABORATORIES
2425 NEW HOLLAND PIKE

LANCASTER, PA 17601
UNITED STATES US

SHIP DATE: 24MAY11
ACTWGT: 45.3 LB
CAD: 614137/CAFE2472
DIMS: 25x16x14 IN

BILL SENDER

TO SAMPLE RECEIVING
TEST AMERICA
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990
DEPT: 40

RT 716

1

FZ

FedEx Express

J1010100901012 4

WED - 25 MAY A4
PRIORITY OVERNIGHT

TRK# 0201 4187 8650 6396

ZF BTVA

05403
VT-US
BTV

Part # 156148-434 RIT2 11/10

505C1/1577/DA47

N ID: LKEA (206) 622-6960
VALENTINE
IER GLOBAL SCIENCES INC.
+14 PONTIUS AVE N

SEATTLE, WA 98109
UNITED STATES US

SHIP DATE: 25MAY11
ACTWGT: 11.5 LB
CAD: 733201/CAFE2472
DIMS: 13x10x10 IN

BILL THIRD PARTY

SAMPLE RECEIPT
TEST AMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
BURLINGTON VT 05403
(802) 660-1990 REF: ALOVJNSAMPLEFORWARD
DEPT: AL

FedEx
Express

E

J101010090101 24

THU - 26 MAY A4
PRIORITY OVERNIGHT

TRK# 0201 4561 2675 2367

XH BTVA

05403
VT-US
BTV

Part # 1561A5-434 NRIT 04-08

505C1/1577/DA47

Analysis Request / Environmental Services Subcontracting Form

Lancaster Laboratories

For Lancaster Laboratories Use Only
Acct: 13013 Group No.: 1248314 Sample Nos.: 6296498-500

Date: 5/24/2011

Subcontractor: TEST AMERICA - BURLINGTON
LLI P.O.#: Courier: Fed Ex
Submit report to: Kathy Binkley Ext.: 1393
Submit invoice to: Kathy Binkley
State where samples were collected: CA

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water (☐ Potable ☐ NPDES)	Matrix: Other	Total # of Containers	Analyses Requested / Preservation Codes: organotin											Comments
SED-035-SIV-SD	05/23/11	15:00	X		X				X			30 cm3					2	Air		6296498 1 Merlg
DUP01-SIV-SD	05/23/11	15:10	X		X				X											6296499
FB07-SIV-SS-052311	05/23/11	16:00	X			X			X												6296500

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

Comments:

Temperature of samples upon receipt (if requested)

Page 185 of 188

Turnaround Time Requested (TAT): (Standard) Rush
Date Results are Needed:
Email Results to: kbinkley@lancasterlabs.com

Relinquished by:	Date	Time	Received by:	Date	Time
	5/24/11	1015		5/25/11	105
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time

Data Package Options (circled when required)
Type I (validation/NJ Reg) Type VI(Raw Data)
Type II (Tier II) Type III (Reduced NJ)
Type IV (CLP SOW) TX TRRP-13

SDG Complete? Yes No

MA MCP
CT RCP

Site-specific QC Required (MS/MSD/DUP)? Yes No
Internal Chain of Custody Required? Yes No

Copies: White copy should accompany samples to Lancaster Laboratories. The yellow copy should be retained by the samplers.

Madison, Jim

From: Nicole Maljovec [nmaljovec@lancasterlabs.com]
Sent: Thursday, June 02, 2011 1:14 PM
To: Madison, Jim
Subject: Change to Sample IDs & Pricing Question

Hi Jim,
Please update the sample IDs for the samples that I sent you last week.

SED-035-SIV-SD is now SED-035-SIV-SDMS
DUP01-SIV-SD is now DUP03-SIV-QC-052311
FB07-SIV-SS-052311 is now FB08-SIV-052311

Also, can you send me a pricing estimate for these samples?

Thanks!
Nicole

Nicole L. Maljovec | **Lancaster Laboratories** | Group Leader, Environmental Client Services | 717 656.2300 x1537 | Fax 717 656.6766
2425 New Holland Pike | PO Box 12425 | Lancaster, PA 17601-2425 | NMaljovec@lancasterlabs.com

Discover how we can meet your analytical needs by visiting our website at www.LancasterLabsEnv.com.
Please consider the environment before printing this e-mail.

CONFIDENTIAL MATERIAL: This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential, and exempt from disclosure under applicable law. If received in error, please notify sender by return e-mail and destroy all copies of the original transmission and any attachments.

Thank you. If you wish to view information about Lancaster Laboratories, Inc., please visit our website at www.lancasterlabs.com

Login Sample Receipt Checklist

Client: Lancaster Laboratories

Job Number: 200-5311-1
SDG Number: 5311

Login Number: 5311
List Number: 1
Creator: Marion, Greg T

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0ºC IR GUN ID 96/CF= 0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Login Sample Receipt Checklist

Client: Lancaster Laboratories

Job Number: 200-5311-1
SDG Number: 5311

Login Number: 5311
List Number: 2
Creator: Marion, Greg T

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	NO SEAL NUMBERS
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.2ºC IR GUN ID 96/CF= 0
COC is present.	False	REPLACEMENT VOLUME FOR SAMPLES RECEIVED 5/25/11
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the sample IDs on the containers and the COC.	N/A	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	Lab does not accept radioactive samples.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

Prepared for:

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

November 04, 2011

Project: SSFL Area IV Collocated Soil Sampling

Submittal Date: 05/24/2011
Group Number: 1248215
SDG: DE159
PO Number: 1203-004-008-AL
Release Number: TRACKING #12090
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LLI) #
SL-084-SA5DN-SB-4.0-5.0 Soil	6296035
SL-089-SA5DN-SB-4.0-5.0 Soil	6296036
SL-081-SA5DN-SB-4.0-5.0 Soil	6296037
SL-081-SA5DN-SB-9.0-10.0 Soil	6296038
SL-075-SA5DN-SB-4.0-5.0 Soil	6296039
SL-075-SA5DN-SB-9.0-10.0 Soil	6296040
TB-052311 Water	6296041
SL-015-SA5DN-SS-0.0-0.5 Soil	6296042
SL-016-SA5DN-SS-0.0-0.5 Soil	6296043
SL-017-SA5DN-SS-0.0-0.5 Soil	6296044
SL-019-SA5DN-SS-0.0-0.5 Soil	6296045
SL-021-SA5DN-SS-0.0-0.5 Soil	6296046
SL-022-SA5DN-SS-0.0-0.5 Soil	6296047
SL-022-SA5DN-SS-0.0-0.5MS Soil	6296048
SL-022-SA5DN-SS-0.0-0.5MSD Soil	6296049
SL-022-SA5DN-SS-0.0-0.5DUP Soil	6296050
SL-023-SA5DN-SS-0.0-0.5 Soil	6296051
SL-052-SA5DN-SS-0.0-0.5 Soil	6296052
SL-053-SA5DN-SS-0.0-0.5 Soil	6296053
DUP05-SA5DN-QC-052311 Soil	6296054
EB05-SA5DN-SS-052311 Water	6296055
SED-035-SIV-SD Sediment	6296056

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

ELECTRONIC COPY TO CDM Federal Services Program Attn: Todd Burgesser
1 COPY TO Data Package Group

Questions? Contact your Client Services Representative
Nicole L Maljovec at (717) 656-2300 Ext. 1537

Respectfully Submitted,

Robert Heisey

Robert Heisey
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.0	J	6.9	8.3		0.93
06192	Benzene	71-43-2	0.10	U	0.10	4.1		0.93
06192	Bromobenzene	108-86-1	0.13	U	0.13	4.1		0.93
06192	Bromochloromethane	74-97-5	0.34	U	0.34	4.1		0.93
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.1		0.93
06192	Bromoform	75-25-2	0.41	U	0.41	4.1		0.93
06192	Bromomethane	74-83-9	0.26	U	0.26	4.1		0.93
06192	2-Butanone	78-93-3	1.3	U	1.3	8.3		0.93
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.1		0.93
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.1		0.93
06192	tert-Butylbenzene	98-06-6	0.16	U	0.16	4.1		0.93
06192	Carbon Tetrachloride	56-23-5	0.14	U	0.14	4.1		0.93
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.1		0.93
06192	Chloroethane	75-00-3	0.13	U	0.13	4.1		0.93
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31	U	0.31	4.1		0.93
06192	Chloroform	67-66-3	0.12	U	0.12	4.1		0.93
06192	Chloromethane	74-87-3	0.34	U	0.34	4.1		0.93
06192	2-Chlorotoluene	95-49-8	0.14	U	0.14	4.1		0.93
06192	4-Chlorotoluene	106-43-4	0.14	U	0.14	4.1		0.93
06192	Chlorotrifluoroethene	79-38-9	0.52	U	0.52	5.2		0.93
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.72	U	0.72	4.1		0.93
06192	Dibromochloromethane	124-48-1	0.21	U	0.21	4.1		0.93
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.1		0.93
06192	Dibromomethane	74-95-3	0.25	U	0.25	4.1		0.93
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.1		0.93
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.1		0.93
06192	1,4-Dichlorobenzene	106-46-7	0.16	U	0.16	4.1		0.93
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.1		0.93
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.1		0.93
06192	1,2-Dichloroethane	107-06-2	0.15	U	0.15	4.1		0.93
06192	1,1-Dichloroethene	75-35-4	0.40	U	0.40	4.1		0.93
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.1		0.93
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.1		0.93
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.1		0.93
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.1		0.93
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.1		0.93
06192	1,1-Dichloropropene	563-58-6	0.13	U	0.13	4.1		0.93
06192	cis-1,3-Dichloropropene	10061-01-5	0.16	U	0.16	4.1		0.93
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.1		0.93
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.1		0.93
06192	Freon 113	76-13-1	0.11	U	0.11	4.1		0.93
06192	Freon 133a	75-88-7	0.52	U	0.52	5.2		0.93
06192	Hexachlorobutadiene	87-68-3	0.14	U	0.14	4.1		0.93
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.3		0.93
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.1		0.93
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.1		0.93
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22	U	0.22	4.1		0.93
06192	4-Methyl-2-pentanone	108-10-1	0.40	U	0.40	8.3		0.93
06192	Methylene Chloride	75-09-2	1.2	J	0.25	4.1		0.93
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.1		0.93

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Styrene	100-42-5	0.10	U	0.10	4.1		0.93
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.1		0.93
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24	U	0.24	4.1		0.93
06192	Tetrachloroethene	127-18-4	0.21	U	0.21	4.1		0.93
06192	Toluene	108-88-3	0.08	U	0.08	4.1		0.93
06192	1,2,3-Trichlorobenzene	87-61-6	0.14	U	0.14	4.1		0.93
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.1		0.93
06192	1,1,1-Trichloroethane	71-55-6	0.21	U	0.21	4.1		0.93
06192	1,1,2-Trichloroethane	79-00-5	0.28	U	0.28	4.1		0.93
06192	Trichloroethene	79-01-6	0.15	U	0.15	4.1		0.93
06192	Trichlorofluoromethane	75-69-4	0.30	U	0.30	4.1		0.93
06192	1,2,3-Trichloropropane	96-18-4	0.34	U	0.34	4.1		0.93
06192	1,2,4-Trimethylbenzene	95-63-6	0.41	U	0.41	4.1		0.93
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.1		0.93
06192	Vinyl Chloride	75-01-4	0.21	U	0.21	4.1		0.93
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.1		0.93
06192	o-Xylene	95-47-6	0.18	U	0.18	4.1		0.93
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS Volatiles	**SW-846 8260B SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10326	1,4-Dioxane	123-91-1	5.5	U	5.5	16		24.85
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180		1
04688	4-Chloroaniline	106-47-8	74	U	74	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrophenol	51-28-5	370	U	370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	74	U	74	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	37	U	37	180		1
04688	4-Methylphenol	106-44-5	37	U	37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	37	U	37	180		1
04688	4-Nitroaniline	100-01-6	74	U	74	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.73	U	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	20		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Chrysene	218-01-9	0.36	U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5	U	6.5	20		1
10138	Fluoranthene	206-44-0	0.73	U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U	0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20		1
10138	Phenanthrene	85-01-8	0.73	U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73	U	0.73	1.8		1
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	66	U	66	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	44	U	44	130	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	88	U	88	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	88	U	88	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	44	U	44	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	44	U	44	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	44	U	44	130	10000000	1
10132	HMX	2691-41-0	110	U	110	330	10000000	1
10132	Nitrobenzene	98-95-3	44	U	44	130	10000000	1
10132	Nitroglycerin	55-63-0	880	U	880	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	88	U	88	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	88	U	88	130	10000000	1
10132	PETN	78-11-5	880	U	880	2,700	10000000	1
10132	RDX	121-82-4	55	U	55	130	10000000	1
10132	Tetryl	479-45-8	68	U	68	130	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	1,3,5-Trinitrobenzene	99-35-4	44	U	44	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	44	U	44	130	10000000	1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36	U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36	U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36	U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43	U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	23,100		5.35	21.3		1
07914	Boron	7440-42-8	0.947	U	0.947	5.32		1
01650	Calcium	7440-70-2	33,200		6.52	21.3		1
01654	Iron	7439-89-6	24,000		5.01	21.3		1
01656	Lithium	7439-93-2	23.5		0.23	2.1		1
01657	Magnesium	7439-95-4	4,850		2.70	10.6		1
06958	Manganese	7439-96-5	211		0.0830	0.532		1
10145	Phosphorus	7723-14-0	224		0.596	10.6		1
01662	Potassium	7440-09-7	2,100		19.1	53.2		1
01667	Sodium	7440-23-5	261		39.7	106		1
07968	Strontium	7440-24-6	44.6		0.0659	0.532		1
06969	Tin	7440-31-5	2.79	J	1.06	10.6		1
06970	Titanium	7440-32-6	1,310		0.404	1.06		1
10146	Zirconium	7440-67-7	4.74	J	0.893	5.32		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.259		0.0664	0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.95		0.0885	0.442		2
06126	Barium	7440-39-3	167		0.119	0.442		2
06127	Beryllium	7440-41-7	0.867		0.0177	0.111		2
06128	Cadmium	7440-43-9	0.153		0.0442	0.111		2
06131	Chromium	7440-47-3	20.7		0.133	0.442		2
06132	Cobalt	7440-48-4	4.97		0.0221	0.111		2
06133	Copper	7440-50-8	14.0		0.0730	0.442		2
06135	Lead	7439-92-1	10.6		0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.605		0.0553	0.111		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06139	Nickel	7440-02-0	20.0	0.111	0.442		2
06141	Selenium	7782-49-2	0.0788 J	0.0442	0.442		2
06142	Silver	7440-22-4	0.0345 J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.405	0.0332	0.111		2
06148	Vanadium	7440-62-2	77.3	0.0243	0.111		2
06149	Zinc	7440-66-6	70.2	0.619	3.32		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0663 J	0.0031	0.108		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	5.9	0.88	1.1		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10 U	10	33.2		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.85 J	0.22	1.1		1
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.34	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	9.6	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-084-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 16:33	Chelsea B Eastep	0.93
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 19:57	Sara E Johnson	24.85

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 15:51	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 15:48	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 07:23	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 17:33	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 20:46	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:00	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:19	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:44	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:37	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:37	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:44	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:44	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:44	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:55	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-084-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-084-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296035
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0844 SDG#: DE159-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 18:48	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 15:13	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 14:50	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	6.9	J	6.3	7.5		0.86
06192	Benzene	71-43-2	0.09	U	0.09	3.8		0.86
06192	Bromobenzene	108-86-1	0.12	U	0.12	3.8		0.86
06192	Bromochloromethane	74-97-5	0.31	U	0.31	3.8		0.86
06192	Bromodichloromethane	75-27-4	0.07	U	0.07	3.8		0.86
06192	Bromoform	75-25-2	0.38	U	0.38	3.8		0.86
06192	Bromomethane	74-83-9	0.24	U	0.24	3.8		0.86
06192	2-Butanone	78-93-3	1.1	U	1.1	7.5		0.86
06192	n-Butylbenzene	104-51-8	0.11	U	0.11	3.8		0.86
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	3.8		0.86
06192	tert-Butylbenzene	98-06-6	0.15	U	0.15	3.8		0.86
06192	Carbon Tetrachloride	56-23-5	0.13	U	0.13	3.8		0.86
06192	Chlorobenzene	108-90-7	0.10	U	0.10	3.8		0.86
06192	Chloroethane	75-00-3	0.12	U	0.12	3.8		0.86
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.28	U	0.28	3.8		0.86
06192	Chloroform	67-66-3	0.11	U	0.11	3.8		0.86
06192	Chloromethane	74-87-3	0.31	U	0.31	3.8		0.86
06192	2-Chlorotoluene	95-49-8	0.13	U	0.13	3.8		0.86
06192	4-Chlorotoluene	106-43-4	0.13	U	0.13	3.8		0.86
06192	Chlorotrifluoroethene	79-38-9	0.47	U	0.47	4.7		0.86
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.66	U	0.66	3.8		0.86
06192	Dibromochloromethane	124-48-1	0.19	U	0.19	3.8		0.86
06192	1,2-Dibromoethane	106-93-4	0.16	U	0.16	3.8		0.86
06192	Dibromomethane	74-95-3	0.23	U	0.23	3.8		0.86
06192	1,2-Dichlorobenzene	95-50-1	0.08	U	0.08	3.8		0.86
06192	1,3-Dichlorobenzene	541-73-1	0.11	U	0.11	3.8		0.86
06192	1,4-Dichlorobenzene	106-46-7	0.15	U	0.15	3.8		0.86
06192	Dichlorodifluoromethane	75-71-8	0.11	U	0.11	3.8		0.86
06192	1,1-Dichloroethane	75-34-3	0.09	U	0.09	3.8		0.86
06192	1,2-Dichloroethane	107-06-2	0.14	U	0.14	3.8		0.86
06192	1,1-Dichloroethene	75-35-4	0.37	U	0.37	3.8		0.86
06192	cis-1,2-Dichloroethene	156-59-2	0.18	U	0.18	3.8		0.86
06192	trans-1,2-Dichloroethene	156-60-5	0.11	U	0.11	3.8		0.86
06192	1,2-Dichloropropane	78-87-5	0.16	U	0.16	3.8		0.86
06192	1,3-Dichloropropane	142-28-9	0.07	U	0.07	3.8		0.86
06192	2,2-Dichloropropane	594-20-7	0.16	U	0.16	3.8		0.86
06192	1,1-Dichloropropene	563-58-6	0.12	U	0.12	3.8		0.86
06192	cis-1,3-Dichloropropene	10061-01-5	0.15	U	0.15	3.8		0.86
06192	trans-1,3-Dichloropropene	10061-02-6	0.16	U	0.16	3.8		0.86
06192	Ethylbenzene	100-41-4	0.06	U	0.06	3.8		0.86
06192	Freon 113	76-13-1	0.10	U	0.10	3.8		0.86
06192	Freon 133a	75-88-7	0.47	U	0.47	4.7		0.86
06192	Hexachlorobutadiene	87-68-3	0.13	U	0.13	3.8		0.86
06192	2-Hexanone	591-78-6	1.5	U	1.5	7.5		0.86
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	3.8		0.86
06192	p-Isopropyltoluene	99-87-6	0.10	U	0.10	3.8		0.86
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.20	U	0.20	3.8		0.86
06192	4-Methyl-2-pentanone	108-10-1	0.37	U	0.37	7.5		0.86
06192	Methylene Chloride	75-09-2	0.82	J	0.23	3.8		0.86
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	3.8		0.86

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.09	U	0.09	3.8		0.86
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.10	U	0.10	3.8		0.86
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.22	U	0.22	3.8		0.86
06192	Tetrachloroethene	127-18-4	0.19	U	0.19	3.8		0.86
06192	Toluene	108-88-3	0.07	U	0.07	3.8		0.86
06192	1,2,3-Trichlorobenzene	87-61-6	0.13	U	0.13	3.8		0.86
06192	1,2,4-Trichlorobenzene	120-82-1	0.17	U	0.17	3.8		0.86
06192	1,1,1-Trichloroethane	71-55-6	0.19	U	0.19	3.8		0.86
06192	1,1,2-Trichloroethane	79-00-5	0.25	U	0.25	3.8		0.86
06192	Trichloroethene	79-01-6	0.14	U	0.14	3.8		0.86
06192	Trichlorofluoromethane	75-69-4	0.27	U	0.27	3.8		0.86
06192	1,2,3-Trichloropropane	96-18-4	0.31	U	0.31	3.8		0.86
06192	1,2,4-Trimethylbenzene	95-63-6	0.38	U	0.38	3.8		0.86
06192	1,3,5-Trimethylbenzene	108-67-8	0.09	U	0.09	3.8		0.86
06192	Vinyl Chloride	75-01-4	0.19	U	0.19	3.8		0.86
06192	m+p-Xylene	179601-23-1	0.16	U	0.16	3.8		0.86
06192	o-Xylene	95-47-6	0.16	U	0.16	3.8		0.86
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	4.6	U	4.6	14		21.11
GC/MS Semivolatiles	**EPA 1625C**		**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	18.3	U	18.3	36.7		1
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1
04688	2,4-Dinitrophenol	51-28-5	370	U	370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	37	U	37	180		1
04688	4-Methylphenol	106-44-5	37	U	37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	37	U	37	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.72	U	0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.72	U	0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.72	U	0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U	0.72	1.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Benzo(k)fluoranthene	207-08-9	0.72	U	0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	20		1
10138	Chrysene	218-01-9	0.36	U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5	U	6.5	20		1
10138	Fluoranthene	206-44-0	0.72	U	0.72	1.8		1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	U	0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.72	U	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72	U	0.72	1.8		1
10138	Naphthalene	91-20-3	0.72	U	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20		1
10138	Phenanthrene	85-01-8	0.72	U	0.72	1.8		1
10138	Pyrene	129-00-0	0.72	U	0.72	1.8		1
GC Volatiles	**TPH GRO SW-846 8015B mod**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05551	9a TPH by EPA 8015B Gas C5-C12	n.a.	0.2	U	0.2	1		22.2
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	66	U	66	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	44	U	44	130	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	88	U	88	260	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	88	U	88	260	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	44	U	44	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	44	U	44	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	44	U	44	130	10000000	1
10132	HMX	2691-41-0	110	U	110	330	10000000	1
10132	Nitrobenzene	98-95-3	44	U	44	130	10000000	1
10132	Nitroglycerin	55-63-0	880	U	880	2,600	10000000	1
10132	2-Nitrotoluene	88-72-2	88	U	88	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Nitrotoluene	99-99-0	88	U	88	130	10000000	1
10132	PETN	78-11-5	880	U	880	2,600	10000000	1
10132	RDX	121-82-4	55	U	55	130	10000000	1
10132	Tetryl	479-45-8	67	U	67	130	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	44	U	44	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	44	U	44	130	10000000	1
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	25a Formaldehyde 8315A	50-00-0	660	U	660	1,700		1
	The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.3	U	2.3	5.5		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36	U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36	U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36	U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43	U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	550		1
10501	Isopropanol	67-63-0	110	U	110	550		1
10501	Methanol	67-56-1	110	U	110	550		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.5	U	5.5	11		1
08283	Ethylene glycol	107-21-1	5.5	U	5.5	11		1
08283	Propylene glycol	57-55-6	5.5	U	5.5	11		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	3.9		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	3.9		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	3.9		1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C15-C20)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C21-C30)	n.a.	0.44	U	0.44	1.3		1
10199	EFH (C30 - C40)	n.a.	0.44	J	0.44	1.3		1
10199	EFH (C8-C11)	n.a.	0.44	U	0.44	1.3		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	25,600		5.48	21.8		1
07914	Boron	7440-42-8	0.969	U	0.969	5.45		1
01650	Calcium	7440-70-2	4,530		6.68	21.8		1
01654	Iron	7439-89-6	27,300		5.13	21.8		1
01656	Lithium	7439-93-2	27.0		0.24	2.2		1
01657	Magnesium	7439-95-4	5,550		2.77	10.9		1
06958	Manganese	7439-96-5	430		0.0850	0.545		1
10145	Phosphorus	7723-14-0	253		0.610	10.9		1
01662	Potassium	7440-09-7	2,650		19.6	54.5		1
01667	Sodium	7440-23-5	191		40.6	109		1
07968	Strontium	7440-24-6	28.8		0.0675	0.545		1
06969	Tin	7440-31-5	3.00	J	1.09	10.9		1
06970	Titanium	7440-32-6	1,390		0.414	1.09		1
10146	Zirconium	7440-67-7	5.65		0.915	5.45		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.370		0.0647	0.216		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	12.3		0.0863	0.431		2
06126	Barium	7440-39-3	176		0.116	0.431		2
06127	Beryllium	7440-41-7	1.14		0.0173	0.108		2
06128	Cadmium	7440-43-9	0.330		0.0431	0.108		2
06131	Chromium	7440-47-3	22.7		0.129	0.431		2
06132	Cobalt	7440-48-4	9.24		0.0216	0.108		2
06133	Copper	7440-50-8	20.1		0.0712	0.431		2
06135	Lead	7439-92-1	15.4		0.0112	0.216		2
06138	Molybdenum	7439-98-7	0.540		0.0539	0.108		2
06139	Nickel	7440-02-0	29.9		0.108	0.431		2
06141	Selenium	7782-49-2	0.0574	J	0.0431	0.431		2
06142	Silver	7440-22-4	0.0750	J	0.0129	0.108		2
06145	Thallium	7440-28-0	0.440		0.0324	0.108		2
06148	Vanadium	7440-62-2	90.3		0.0237	0.108		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06149	Zinc	7440-66-6	79.6		0.604	3.24		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0030	U	0.0030	0.103		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.1		0.88	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.1	J	0.88	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.9	U	9.9	33.0		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.41	J	0.22	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.19	U	0.19	0.53		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	7.55		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	9.1		0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-089-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 16:55	Chelsea B Eastep	0.86
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 20:17	Sara E Johnson	21.11
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 15:56	Lois E Hiltz	n.a.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:17	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 15:54	Lois E Hiltz	n.a.
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 20:05	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 07:49	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 18:04	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
05551	9a TPH by EPA 8015B Gas C5-C12	TPH GRO SW-846 8015B mod	1	11151B34A	05/31/2011 17:01	Elizabeth J Marin	22.2
06130	GC - 5 g HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 15:53	Lois E Hiltz	n.a.
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 21:28	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 08:44	Michele D Hamilton	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/06/2011 21:40	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:18	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:13	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 20:24	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 07:22	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111570011A	06/07/2011 22:48	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	2	111570011A	06/06/2011 18:30	Sally L Appleyard	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:47	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:24	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:24	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:40	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 19:30	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 19:30	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 16:19	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 14:56	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:33	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-089-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-089-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296036
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0894 SDG#: DE159-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.7		7.0	8.3		0.94
06192	Benzene	71-43-2	0.10	U	0.10	4.2		0.94
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.2		0.94
06192	Bromochloromethane	74-97-5	0.34	U	0.34	4.2		0.94
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.2		0.94
06192	Bromoform	75-25-2	0.42	U	0.42	4.2		0.94
06192	Bromomethane	74-83-9	0.26	U	0.26	4.2		0.94
06192	2-Butanone	78-93-3	1.3	U	1.3	8.3		0.94
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.2		0.94
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.2		0.94
06192	tert-Butylbenzene	98-06-6	0.17	U	0.17	4.2		0.94
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.2		0.94
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.2		0.94
06192	Chloroethane	75-00-3	0.14	U	0.14	4.2		0.94
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31	U	0.31	4.2		0.94
06192	Chloroform	67-66-3	0.12	U	0.12	4.2		0.94
06192	Chloromethane	74-87-3	0.34	U	0.34	4.2		0.94
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.2		0.94
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.2		0.94
06192	Chlorotrifluoroethene	79-38-9	0.52	U	0.52	5.2		0.94
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.73	U	0.73	4.2		0.94
06192	Dibromochloromethane	124-48-1	0.21	U	0.21	4.2		0.94
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.2		0.94
06192	Dibromomethane	74-95-3	0.25	U	0.25	4.2		0.94
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.2		0.94
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.2		0.94
06192	1,4-Dichlorobenzene	106-46-7	0.17	U	0.17	4.2		0.94
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.2		0.94
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.2		0.94
06192	1,2-Dichloroethane	107-06-2	0.16	U	0.16	4.2		0.94
06192	1,1-Dichloroethene	75-35-4	0.41	U	0.41	4.2		0.94
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.2		0.94
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.2		0.94
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.2		0.94
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.2		0.94
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.2		0.94
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.2		0.94
06192	cis-1,3-Dichloropropene	10061-01-5	0.17	U	0.17	4.2		0.94
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.2		0.94
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.2		0.94
06192	Freon 113	76-13-1	0.11	U	0.11	4.2		0.94
06192	Freon 133a	75-88-7	0.52	U	0.52	5.2		0.94
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.2		0.94
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.3		0.94
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.2		0.94
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.2		0.94
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22	U	0.22	4.2		0.94
06192	4-Methyl-2-pentanone	108-10-1	0.41	U	0.41	8.3		0.94
06192	Methylene Chloride	75-09-2	0.79	J	0.25	4.2		0.94
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.2		0.94

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.10	U	0.10	4.2		0.94
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.2		0.94
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24	U	0.24	4.2		0.94
06192	Tetrachloroethene	127-18-4	0.21	U	0.21	4.2		0.94
06192	Toluene	108-88-3	0.08	U	0.08	4.2		0.94
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.2		0.94
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.2		0.94
06192	1,1,1-Trichloroethane	71-55-6	0.21	U	0.21	4.2		0.94
06192	1,1,2-Trichloroethane	79-00-5	0.28	U	0.28	4.2		0.94
06192	Trichloroethene	79-01-6	0.16	U	0.16	4.2		0.94
06192	Trichlorofluoromethane	75-69-4	0.30	U	0.30	4.2		0.94
06192	1,2,3-Trichloropropane	96-18-4	0.34	U	0.34	4.2		0.94
06192	1,2,4-Trimethylbenzene	95-63-6	0.42	U	0.42	4.2		0.94
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.2		0.94
06192	Vinyl Chloride	75-01-4	0.21	U	0.21	4.2		0.94
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.2		0.94
06192	o-Xylene	95-47-6	0.18	U	0.18	4.2		0.94
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.							
GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.3	U	5.3	16		23.95
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrophenol	51-28-5	370	U	370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	37	U	37	180		1
04688	4-Methylphenol	106-44-5	37	U	37	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	37	U	37	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.72	U	0.72	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.72	U	0.72	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.72	U	0.72	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	0.72	U	0.72	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.72	U	0.72	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.72	U	0.72	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.5	U	6.5	20		1
10138	Di-n-butylphthalate	84-74-2	6.5	U	6.5	20		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Chrysene	218-01-9	0.36	U	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.72	U	0.72	1.8		1
10138	Diethylphthalate	84-66-2	6.5	U	6.5	20		1
10138	Dimethylphthalate	131-11-3	6.5	U	6.5	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.5	U	6.5	20		1
10138	Fluoranthene	206-44-0	0.72	U	0.72	1.8		1
10138	Fluorene	86-73-7	0.72	U	0.72	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	U	0.72	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.72	U	0.72	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.72	U	0.72	1.8		1
10138	Naphthalene	91-20-3	0.72	U	0.72	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.72	U	0.72	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.5	U	6.5	20		1
10138	Phenanthrene	85-01-8	0.72	U	0.72	1.8		1
10138	Pyrene	129-00-0	0.72	U	0.72	1.8		1
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	66	U	66	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	44	U	44	130	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	88	U	88	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	88	U	88	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	44	U	44	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	44	U	44	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	44	U	44	130	10000000	1
10132	HMX	2691-41-0	110	U	110	330	10000000	1
10132	Nitrobenzene	98-95-3	44	U	44	130	10000000	1
10132	Nitroglycerin	55-63-0	880	U	880	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	88	U	88	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	88	U	88	130	10000000	1
10132	PETN	78-11-5	880	U	880	2,700	10000000	1
10132	RDX	121-82-4	55	U	55	130	10000000	1
10132	Tetryl	479-45-8	68	U	68	130	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	1,3,5-Trinitrobenzene	99-35-4	44	U	44	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	44	U	44	130	10000000	1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36	U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36	U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36	U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43	U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	28,900		5.56	22.1		1
07914	Boron	7440-42-8	1.00	J	0.983	5.52		1
01650	Calcium	7440-70-2	7,380		6.77	22.1		1
01654	Iron	7439-89-6	29,500		10.4	44.2		2
01656	Lithium	7439-93-2	28.1		0.24	2.2		1
01657	Magnesium	7439-95-4	6,630		2.81	11.0		1
06958	Manganese	7439-96-5	407		0.0862	0.552		1
10145	Phosphorus	7723-14-0	313		0.619	11.0		1
01662	Potassium	7440-09-7	3,490		19.9	55.2		1
01667	Sodium	7440-23-5	575		41.2	110		1
07968	Strontium	7440-24-6	39.1		0.0685	0.552		1
06969	Tin	7440-31-5	2.78	J	1.10	11.0		1
06970	Titanium	7440-32-6	1,710		0.420	1.10		1
10146	Zirconium	7440-67-7	6.40		0.928	5.52		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.331		0.0656	0.219		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.31		0.0875	0.438		2
06126	Barium	7440-39-3	217		0.295	1.09		5
06127	Beryllium	7440-41-7	1.04		0.0175	0.109		2
06128	Cadmium	7440-43-9	0.448		0.0438	0.109		2
06131	Chromium	7440-47-3	28.3		0.131	0.438		2
06132	Cobalt	7440-48-4	14.7		0.0219	0.109		2
06133	Copper	7440-50-8	18.2		0.0722	0.438		2
06135	Lead	7439-92-1	14.7		0.0114	0.219		2
06138	Molybdenum	7439-98-7	0.579		0.0547	0.109		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06139	Nickel		7440-02-0	29.5	0.109	0.438		2
06141	Selenium		7782-49-2	0.0438 U	0.0438	0.438		2
06142	Silver		7440-22-4	0.0729 J	0.0131	0.109		2
06145	Thallium		7440-28-0	0.478	0.0328	0.109		2
06148	Vanadium		7440-62-2	93.1	0.0241	0.109		2
06149	Zinc		7440-66-6	86.3	0.613	3.28		2
		SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury		7439-97-6	0.0030 U	0.0030	0.106		1
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride		16984-48-8	20.8	0.88	1.1		1
		EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0		14797-73-0	9.9 U	9.9	33.1		1
		SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199		18540-29-9	1.4	0.22	1.1		1
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C		n.a.	8.13	0.0100	0.0100		1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	Moisture Content by 160.3		n.a.	9.5	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-081-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 17:17	Chelsea B Eastep	0.94
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 20:36	Sara E Johnson	23.95

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:03	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 16:00	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 08:15	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 18:36	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 22:11	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:37	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:55	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:22	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:44	David K Beck	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:42	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:42	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:47	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:47	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:47	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:56	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-081-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296037
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0814 SDG#: DE159-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 19:45	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 16:41	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 15:13	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	540		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,600		1
04688	Benzoic acid	65-85-0	180	U	180	540		1
04688	Benzyl alcohol	100-51-6	180	U	180	540		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	36	U	36	180		1
04688	4-Chloroaniline	106-47-8	73	U	73	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	36	U	36	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	36	U	36	180		1
04688	3,5-Dimethylphenol	108-68-9	36	U	36	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	540		1
04688	2,4-Dinitrophenol	51-28-5	360	U	360	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	36	U	36	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	73	U	73	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	540		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	36	U	36	180		1
04688	4-Methylphenol	106-44-5	36	U	36	180		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	36	U	36	180		1
04688	4-Nitroaniline	100-01-6	73	U	73	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	540		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	180	U	180	540		1
04688	Phenol	108-95-2	18	U	18	180		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	36	U	36	180		1
04688	2,4,6-Trichlorophenol	88-06-2	36	U	36	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.73	U	0.73	1.8		1
10138	Acenaphthylene	208-96-8	0.36	U	0.36	1.8		1
10138	Anthracene	120-12-7	0.36	U	0.36	1.8		1
10138	Benzo(a)anthracene	56-55-3	0.73	U	0.73	1.8		1
10138	Benzo(a)pyrene	50-32-8	0.73	U	0.73	1.8		1
10138	Benzo(b)fluoranthene	205-99-2	1.1	J	0.73	1.8		1
10138	Benzo(g,h,i)perylene	191-24-2	0.73	U	0.73	1.8		1
10138	Benzo(k)fluoranthene	207-08-9	0.73	U	0.73	1.8		1
10138	Butylbenzylphthalate	85-68-7	6.6	U	6.6	20		1
10138	Di-n-butylphthalate	84-74-2	6.6	U	6.6	20		1
10138	Chrysene	218-01-9	0.55	J	0.36	1.8		1
10138	Dibenz(a,h)anthracene	53-70-3	0.73	U	0.73	1.8		1
10138	Diethylphthalate	84-66-2	6.6	U	6.6	20		1
10138	Dimethylphthalate	131-11-3	6.6	U	6.6	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.6	U	6.6	20		1
10138	Fluoranthene	206-44-0	0.73	U	0.73	1.8		1
10138	Fluorene	86-73-7	0.73	U	0.73	1.8		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.73	U	0.73	1.8		1
10138	1-Methylnaphthalene	90-12-0	0.73	U	0.73	1.8		1
10138	2-Methylnaphthalene	91-57-6	0.73	U	0.73	1.8		1
10138	Naphthalene	91-20-3	0.73	U	0.73	1.8		1
10138	N-Nitrosodimethylamine	62-75-9	0.73	U	0.73	1.8		1
10138	Di-n-octylphthalate	117-84-0	6.6	U	6.6	20		1
10138	Phenanthrene	85-01-8	0.73	U	0.73	1.8		1
10138	Pyrene	129-00-0	0.73	U	0.73	1.8		1
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	64	U	64	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	43	U	43	130	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	86	U	86	260	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	86	U	86	260	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	1,3-Dinitrobenzene	99-65-0	43	U	43	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	43	U	43	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	43	U	43	130	10000000	1
10132	HMX	2691-41-0	110	U	110	320	10000000	1
10132	Nitrobenzene	98-95-3	43	U	43	130	10000000	1
10132	Nitroglycerin	55-63-0	860	U	860	2,600	10000000	1
10132	2-Nitrotoluene	88-72-2	86	U	86	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	86	U	86	130	10000000	1
10132	PETN	78-11-5	860	U	860	2,600	10000000	1
10132	RDX	121-82-4	54	U	54	130	10000000	1
10132	Tetryl	479-45-8	66	U	66	130	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	43	U	43	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	43	U	43	130	10000000	1
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.6		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.6		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.6		1
10225	PCB-1016	12674-11-2	0.36	U	0.36	1.9		1
10225	PCB-1221	11104-28-2	0.36	U	0.36	1.9		1
10225	PCB-1232	11141-16-5	0.36	U	0.36	1.9		1
10225	PCB-1242	53469-21-9	0.36	U	0.36	1.9		1
10225	PCB-1248	12672-29-6	0.36	U	0.36	1.9		1
10225	PCB-1254	11097-69-1	0.36	U	0.36	1.9		1
10225	PCB-1260	11096-82-5	0.43	U	0.43	1.9		1
10225	PCB-1262	37324-23-5	0.36	U	0.36	1.9		1
10225	PCB-1268	11100-14-4	0.36	U	0.36	1.9		1
Metals	**SW-846 6010B**		mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	19,100		5.29	21.0		1
07914	Boron	7440-42-8	0.935	U	0.935	5.25		1
01650	Calcium	7440-70-2	7,150		6.44	21.0		1
01654	Iron	7439-89-6	21,500		4.95	21.0		1
01656	Lithium	7439-93-2	25.8		0.23	2.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01657	Magnesium	7439-95-4	4,490		2.67	10.5		1
06958	Manganese	7439-96-5	284		0.0820	0.525		1
10145	Phosphorus	7723-14-0	291		0.588	10.5		1
01662	Potassium	7440-09-7	2,320		18.9	52.5		1
01667	Sodium	7440-23-5	341		39.2	105		1
07968	Strontium	7440-24-6	23.0		0.0652	0.525		1
06969	Tin	7440-31-5	2.66	J	1.05	10.5		1
06970	Titanium	7440-32-6	1,230		0.399	1.05		1
10146	Zirconium	7440-67-7	3.95	J	0.883	5.25		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.179	J	0.0643	0.214		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.69		0.0857	0.429		2
06126	Barium	7440-39-3	113		0.116	0.429		2
06127	Beryllium	7440-41-7	0.735		0.0171	0.107		2
06128	Cadmium	7440-43-9	0.162		0.0429	0.107		2
06131	Chromium	7440-47-3	18.7		0.129	0.429		2
06132	Cobalt	7440-48-4	6.21		0.0214	0.107		2
06133	Copper	7440-50-8	10.8		0.0707	0.429		2
06135	Lead	7439-92-1	7.15		0.0111	0.214		2
06138	Molybdenum	7439-98-7	0.418		0.0536	0.107		2
06139	Nickel	7440-02-0	17.7		0.107	0.429		2
06141	Selenium	7782-49-2	0.0429	U	0.0429	0.429		2
06142	Silver	7440-22-4	0.0560	J	0.0129	0.107		2
06145	Thallium	7440-28-0	0.337		0.0321	0.107		2
06148	Vanadium	7440-62-2	55.1		0.0236	0.107		2
06149	Zinc	7440-66-6	63.5		0.600	3.21		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0130	J	0.0031	0.109		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.9		0.87	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	9.8	U	9.8	32.8		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.22	U	0.22	1.1		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.60		0.0100	0.0100		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0819 SDG#: DE159-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	8.5	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 08:42	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 19:06	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 22:53	James H Place	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 04:55	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:26	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:50	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:46	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:46	David K Beck	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-081-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-081-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296038
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 13:15

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0819 SDG#: DE159-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:50	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:50	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:50	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:58	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 19:59	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 17:25	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 15:19	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/kg		ug/kg	ug/kg	ug/kg	
06192	Acetone	67-64-1	8.5		6.9	8.3		0.9
06192	Benzene	71-43-2	0.10	U	0.10	4.1		0.9
06192	Bromobenzene	108-86-1	0.14	U	0.14	4.1		0.9
06192	Bromochloromethane	74-97-5	0.34	U	0.34	4.1		0.9
06192	Bromodichloromethane	75-27-4	0.08	U	0.08	4.1		0.9
06192	Bromoform	75-25-2	0.41	U	0.41	4.1		0.9
06192	Bromomethane	74-83-9	0.26	U	0.26	4.1		0.9
06192	2-Butanone	78-93-3	1.3	U	1.3	8.3		0.9
06192	n-Butylbenzene	104-51-8	0.12	U	0.12	4.1		0.9
06192	sec-Butylbenzene	135-98-8	0.06	U	0.06	4.1		0.9
06192	tert-Butylbenzene	98-06-6	0.17	U	0.17	4.1		0.9
06192	Carbon Tetrachloride	56-23-5	0.15	U	0.15	4.1		0.9
06192	Chlorobenzene	108-90-7	0.11	U	0.11	4.1		0.9
06192	Chloroethane	75-00-3	0.14	U	0.14	4.1		0.9
06192	2-Chloroethyl Vinyl Ether	110-75-8	0.31	U	0.31	4.1		0.9
06192	Chloroform	67-66-3	0.12	U	0.12	4.1		0.9
06192	Chloromethane	74-87-3	0.34	U	0.34	4.1		0.9
06192	2-Chlorotoluene	95-49-8	0.15	U	0.15	4.1		0.9
06192	4-Chlorotoluene	106-43-4	0.15	U	0.15	4.1		0.9
06192	Chlorotrifluoroethene	79-38-9	0.52	U	0.52	5.2		0.9
06192	1,2-Dibromo-3-chloropropane	96-12-8	0.73	U	0.73	4.1		0.9
06192	Dibromochloromethane	124-48-1	0.21	U	0.21	4.1		0.9
06192	1,2-Dibromoethane	106-93-4	0.18	U	0.18	4.1		0.9
06192	Dibromomethane	74-95-3	0.25	U	0.25	4.1		0.9
06192	1,2-Dichlorobenzene	95-50-1	0.09	U	0.09	4.1		0.9
06192	1,3-Dichlorobenzene	541-73-1	0.12	U	0.12	4.1		0.9
06192	1,4-Dichlorobenzene	106-46-7	0.17	U	0.17	4.1		0.9
06192	Dichlorodifluoromethane	75-71-8	0.12	U	0.12	4.1		0.9
06192	1,1-Dichloroethane	75-34-3	0.10	U	0.10	4.1		0.9
06192	1,2-Dichloroethane	107-06-2	0.16	U	0.16	4.1		0.9
06192	1,1-Dichloroethene	75-35-4	0.40	U	0.40	4.1		0.9
06192	cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	4.1		0.9
06192	trans-1,2-Dichloroethene	156-60-5	0.12	U	0.12	4.1		0.9
06192	1,2-Dichloropropane	78-87-5	0.18	U	0.18	4.1		0.9
06192	1,3-Dichloropropane	142-28-9	0.08	U	0.08	4.1		0.9
06192	2,2-Dichloropropane	594-20-7	0.18	U	0.18	4.1		0.9
06192	1,1-Dichloropropene	563-58-6	0.14	U	0.14	4.1		0.9
06192	cis-1,3-Dichloropropene	10061-01-5	0.17	U	0.17	4.1		0.9
06192	trans-1,3-Dichloropropene	10061-02-6	0.18	U	0.18	4.1		0.9
06192	Ethylbenzene	100-41-4	0.06	U	0.06	4.1		0.9
06192	Freon 113	76-13-1	0.11	U	0.11	4.1		0.9
06192	Freon 133a	75-88-7	0.52	U	0.52	5.2		0.9
06192	Hexachlorobutadiene	87-68-3	0.15	U	0.15	4.1		0.9
06192	2-Hexanone	591-78-6	1.7	U	1.7	8.3		0.9
06192	Isopropylbenzene	98-82-8	0.06	U	0.06	4.1		0.9
06192	p-Isopropyltoluene	99-87-6	0.11	U	0.11	4.1		0.9
06192	Methyl Tertiary Butyl Ether	1634-04-4	0.22	U	0.22	4.1		0.9
06192	4-Methyl-2-pentanone	108-10-1	0.40	U	0.40	8.3		0.9
06192	Methylene Chloride	75-09-2	1.1	J	0.25	4.1		0.9
06192	n-Propylbenzene	103-65-1	0.07	U	0.07	4.1		0.9

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06192	Styrene	100-42-5	0.10	U	0.10	4.1		0.9
06192	1,1,1,2-Tetrachloroethane	630-20-6	0.11	U	0.11	4.1		0.9
06192	1,1,2,2-Tetrachloroethane	79-34-5	0.24	U	0.24	4.1		0.9
06192	Tetrachloroethene	127-18-4	0.21	U	0.21	4.1		0.9
06192	Toluene	108-88-3	0.08	U	0.08	4.1		0.9
06192	1,2,3-Trichlorobenzene	87-61-6	0.15	U	0.15	4.1		0.9
06192	1,2,4-Trichlorobenzene	120-82-1	0.19	U	0.19	4.1		0.9
06192	1,1,1-Trichloroethane	71-55-6	0.21	U	0.21	4.1		0.9
06192	1,1,2-Trichloroethane	79-00-5	0.28	U	0.28	4.1		0.9
06192	Trichloroethene	79-01-6	0.16	U	0.16	4.1		0.9
06192	Trichlorofluoromethane	75-69-4	0.30	U	0.30	4.1		0.9
06192	1,2,3-Trichloropropane	96-18-4	0.34	U	0.34	4.1		0.9
06192	1,2,4-Trimethylbenzene	95-63-6	0.41	U	0.41	4.1		0.9
06192	1,3,5-Trimethylbenzene	108-67-8	0.10	U	0.10	4.1		0.9
06192	Vinyl Chloride	75-01-4	0.21	U	0.21	4.1		0.9
06192	m+p-Xylene	179601-23-1	0.18	U	0.18	4.1		0.9
06192	o-Xylene	95-47-6	0.18	U	0.18	4.1		0.9

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: Freon 133a.

GC/MS Volatiles	**SW-846 8260B SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10326	1,4-Dioxane	123-91-1	5.2	U	5.2	15		22.36
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	76	U	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	76	U	76	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	0.76	U	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Chrysene	218-01-9	0.38	U	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.9	U	6.9	21		1
10138	Fluoranthene	206-44-0	0.76	U	0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76	U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21		1
10138	Phenanthrene	85-01-8	0.76	U	0.76	1.9		1
10138	Pyrene	129-00-0	0.76	U	0.76	1.9		1
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	3.9	J	2.4	5.8		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.2	U	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	2.0		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0		1
10225	PCB-1260	11096-82-5	0.45	U	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,900		5.58	22.2		1
07914	Boron	7440-42-8	0.988	U	0.988	5.55		1
01650	Calcium	7440-70-2	10,300		6.81	22.2		1
01654	Iron	7439-89-6	31,600		10.5	44.4		2
01656	Lithium	7439-93-2	35.2		0.24	2.2		1
01657	Magnesium	7439-95-4	6,880		2.82	11.1		1
06958	Manganese	7439-96-5	178		0.0866	0.555		1
10145	Phosphorus	7723-14-0	226		0.622	11.1		1
01662	Potassium	7440-09-7	3,230		20.0	55.5		1
01667	Sodium	7440-23-5	714		41.4	111		1
07968	Strontium	7440-24-6	57.5		0.0688	0.555		1
06969	Tin	7440-31-5	3.00	J	1.11	11.1		1
06970	Titanium	7440-32-6	1,290		0.422	1.11		1
10146	Zirconium	7440-67-7	4.75	J	0.933	5.55		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.204 J	0.0679	0.226		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	7.08	0.0906	0.453		2
06126	Barium	7440-39-3	170	0.122	0.453		2
06127	Beryllium	7440-41-7	1.00	0.0181	0.113		2
06128	Cadmium	7440-43-9	0.490	0.0453	0.113		2
06131	Chromium	7440-47-3	26.8	0.136	0.453		2
06132	Cobalt	7440-48-4	8.52	0.0226	0.113		2
06133	Copper	7440-50-8	16.8	0.0747	0.453		2
06135	Lead	7439-92-1	13.3	0.0118	0.226		2
06138	Molybdenum	7439-98-7	0.224	0.0566	0.113		2
06139	Nickel	7440-02-0	28.7	0.113	0.453		2
06141	Selenium	7782-49-2	0.0453 U	0.0453	0.453		2
06142	Silver	7440-22-4	0.0595 J	0.0136	0.113		2
06145	Thallium	7440-28-0	0.477	0.0340	0.113		2
06148	Vanadium	7440-62-2	77.2	0.0249	0.113		2
06149	Zinc	7440-66-6	76.6	0.634	3.40		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032 U	0.0032	0.111		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	13.3	0.92	1.2		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.6		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.32 J	0.23	1.2		1
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.54	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	13.4	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

General Sample Comments

State of California Lab Certification No. 2501
The volatile analysis was performed on soil from SL-075-SA5DN-SB-4.5.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06192	1a Volatile Organics EPA 8260B	SW-846 8260B	1	B111471AA	05/27/2011 17:40	Chelsea B Eastep	0.9
10326	14a 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111462AA	05/26/2011 20:56	Sara E Johnson	22.36
08390	GC/MS - HL Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:09	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	1	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07320	GC/MS - LL DIH2O Encore Prep	SW-846 5035	2	201114424493	05/24/2011 16:18	Lois E Hiltz	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035	1	201114424493	05/24/2011 16:06	Lois E Hiltz	n.a.
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 09:08	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 19:38	Joseph M Gambler	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 21:59	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 05:13	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:59	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:29	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:53	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-075-SA5DN-SB-4.0-5.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-4.0-5.0

LLI Sample # SW 6296039
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0754 SDG#: DE159-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:48	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:48	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:53	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:53	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:53	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:59	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 20:13	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 17:47	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 15:36	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	76	U	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	24	J	19	380		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	76	U	76	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.8	U	3.8	9.4		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.4		5
10138	Anthracene	120-12-7	1.9	U	1.9	9.4		5
10138	Benzo(a)anthracene	56-55-3	3.8	U	3.8	9.4		5
10138	Benzo(a)pyrene	50-32-8	3.8	U	3.8	9.4		5
10138	Benzo(b)fluoranthene	205-99-2	4.2	J	3.8	9.4		5
10138	Benzo(g,h,i)perylene	191-24-2	3.8	U	3.8	9.4		5
10138	Benzo(k)fluoranthene	207-08-9	3.8	U	3.8	9.4		5
10138	Chrysene	218-01-9	3.4	J	1.9	9.4		5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U	3.8	9.4		5
10138	Fluoranthene	206-44-0	5.0	J	3.8	9.4		5
10138	Fluorene	86-73-7	3.8	U	3.8	9.4		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U	3.8	9.4		5
10138	1-Methylnaphthalene	90-12-0	3.8	U	3.8	9.4		5
10138	2-Methylnaphthalene	91-57-6	3.8	U	3.8	9.4		5
10138	Naphthalene	91-20-3	7.6	J	3.8	9.4		5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U	3.8	9.4		5
10138	Phenanthrene	85-01-8	8.6	J	3.8	9.4		5
10138	Pyrene	129-00-0	3.8	U	3.8	9.4		5
	Reporting limits were raised due to interference from the sample matrix.							
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.4	U	2.4	5.8		1
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1232	11141-16-5	0.38	U	0.38	1.9		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9		1
10225	PCB-1260	11096-82-5	0.45	U	0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	16,500		5.67	22.6		1
07914	Boron	7440-42-8	1.00	U	1.00	5.64		1
01650	Calcium	7440-70-2	42,600		6.92	22.6		1
01654	Iron	7439-89-6	19,700		5.31	22.6		1
01656	Lithium	7439-93-2	22.4		0.25	2.3		1
01657	Magnesium	7439-95-4	4,760		2.87	11.3		1
06958	Manganese	7439-96-5	301		0.0880	0.564		1
10145	Phosphorus	7723-14-0	387		0.632	11.3		1
01662	Potassium	7440-09-7	2,500		20.3	56.4		1
01667	Sodium	7440-23-5	393		42.1	113		1
07968	Strontium	7440-24-6	78.8		0.0699	0.564		1
06969	Tin	7440-31-5	2.78	J	1.13	11.3		1
06970	Titanium	7440-32-6	1,230		0.429	1.13		1
10146	Zirconium	7440-67-7	4.70	J	0.948	5.64		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.194	J	0.0664	0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.16		0.0885	0.443		2
06126	Barium	7440-39-3	125		0.120	0.443		2
06127	Beryllium	7440-41-7	0.645		0.0177	0.111		2
06128	Cadmium	7440-43-9	0.484		0.0443	0.111		2
06131	Chromium	7440-47-3	20.7		0.133	0.443		2
06132	Cobalt	7440-48-4	8.19		0.0221	0.111		2
06133	Copper	7440-50-8	13.2		0.0730	0.443		2
06135	Lead	7439-92-1	8.38		0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.782		0.0553	0.111		2
06139	Nickel	7440-02-0	24.4		0.111	0.443		2
06141	Selenium	7782-49-2	0.0459	J	0.0443	0.443		2
06142	Silver	7440-22-4	0.0669	J	0.0133	0.111		2
06145	Thallium	7440-28-0	0.379		0.0332	0.111		2
06148	Vanadium	7440-62-2	59.4		0.0243	0.111		2
06149	Zinc	7440-66-6	62.8		0.620	3.32		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032	U	0.0032	0.112		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0759 SDG#: DE159-06

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	6.3		0.92	1.2		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4	U	10.4	34.5		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.36	J	0.23	1.2		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.91		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	13.1		0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 09:35	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 09:52	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 22:05	Richard A Shober	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 05:32	Richard A Shober	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-075-SA5DN-SB-9.0-10.0 Soil
SSFL Area IV Collocated Soil Sampling
SL-075-SA5DN-SB-9.0-10.0

LLI Sample # SW 6296040
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:45

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

S0759 SDG#: DE159-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:40	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:56	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:49	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:49	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:56	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:56	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:56	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:00	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 20:56	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 18:09	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 15:47	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: TB-052311 Water
SSFL Area IV Collocated Soil Sampling
TB-052311

LLI Sample # WW 6296041
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

TB523 SDG#: DE159-07TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	ug/l	
10904	Acetone	67-64-1	6	U	6	20		1
10904	Benzene	71-43-2	0.5	U	0.5	5		1
10904	Bromobenzene	108-86-1	1	U	1	5		1
10904	Bromochloromethane	74-97-5	1	U	1	5		1
10904	Bromodichloromethane	75-27-4	1	U	1	5		1
10904	Bromoform	75-25-2	1	U	1	5		1
10904	Bromomethane	74-83-9	1	U	1	5		1
10904	2-Butanone	78-93-3	3	U	3	10		1
10904	n-Butylbenzene	104-51-8	1	U	1	5		1
10904	sec-Butylbenzene	135-98-8	1	U	1	5		1
10904	tert-Butylbenzene	98-06-6	1	U	1	5		1
10904	Carbon Tetrachloride	56-23-5	1	U	1	5		1
10904	Chlorobenzene	108-90-7	0.8	U	0.8	5		1
10904	Chloroethane	75-00-3	1	U	1	5		1
10904	2-Chloroethyl Vinyl Ether	110-75-8	2	U	2	10		1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.							
10904	Chloroform	67-66-3	0.8	U	0.8	5		1
10904	Chloromethane	74-87-3	1	U	1	5		1
10904	2-Chlorotoluene	95-49-8	1	U	1	5		1
10904	4-Chlorotoluene	106-43-4	1	U	1	5		1
10904	Chlorotrifluoroethene	79-38-9	2	U	2	5		1
10904	1,2-Dibromo-3-chloropropane	96-12-8	2	U	2	5		1
10904	Dibromochloromethane	124-48-1	1	U	1	5		1
10904	1,2-Dibromoethane	106-93-4	1	U	1	5		1
10904	Dibromomethane	74-95-3	1	U	1	5		1
10904	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
10904	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
10904	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
10904	Dichlorodifluoromethane	75-71-8	2	U	2	5		1
10904	1,1-Dichloroethane	75-34-3	1	U	1	5		1
10904	1,2-Dichloroethane	107-06-2	1	U	1	5		1
10904	1,1-Dichloroethene	75-35-4	0.8	U	0.8	5		1
10904	cis-1,2-Dichloroethene	156-59-2	0.8	U	0.8	5		1
10904	trans-1,2-Dichloroethene	156-60-5	0.8	U	0.8	5		1
10904	1,2-Dichloropropane	78-87-5	1	U	1	5		1
10904	1,3-Dichloropropane	142-28-9	1	U	1	5		1
10904	2,2-Dichloropropane	594-20-7	1	U	1	5		1
10904	1,1-Dichloropropene	563-58-6	1	U	1	5		1
10904	cis-1,3-Dichloropropene	10061-01-5	1	U	1	5		1
10904	trans-1,3-Dichloropropene	10061-02-6	1	U	1	5		1
10904	Ethylbenzene	100-41-4	0.8	U	0.8	5		1
10904	Freon 113	76-13-1	2	U	2	10		1
10904	Freon 133a	75-88-7	2	U	2	5		1
10904	Hexachlorobutadiene	87-68-3	2	U	2	5		1
10904	2-Hexanone	591-78-6	3	U	3	10		1
10904	Isopropylbenzene	98-82-8	1	U	1	5		1
10904	p-Isopropyltoluene	99-87-6	1	U	1	5		1
10904	Methyl Tertiary Butyl Ether	1634-04-4	0.5	U	0.5	5		1
10904	4-Methyl-2-pentanone	108-10-1	3	U	3	10		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: TB-052311 Water
SSFL Area IV Collocated Soil Sampling
TB-052311

LLI Sample # WW 6296041
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

TB523 SDG#: DE159-07TB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l		ug/l	ug/l	ug/l	
10904	Methylene Chloride	75-09-2	2	U	2	5		1
10904	n-Propylbenzene	103-65-1	1	U	1	5		1
10904	Styrene	100-42-5	1	U	1	5		1
10904	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	5		1
10904	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	5		1
10904	Tetrachloroethene	127-18-4	0.8	U	0.8	5		1
10904	Toluene	108-88-3	0.7	U	0.7	5		1
10904	1,2,3-Trichlorobenzene	87-61-6	1	U	1	5		1
10904	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
10904	1,1,1-Trichloroethane	71-55-6	0.8	U	0.8	5		1
10904	1,1,2-Trichloroethane	79-00-5	0.8	U	0.8	5		1
10904	Trichloroethene	79-01-6	1	U	1	5		1
10904	Trichlorofluoromethane	75-69-4	2	U	2	5		1
10904	1,2,3-Trichloropropane	96-18-4	1	U	1	5		1
10904	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5		1
10904	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5		1
10904	Vinyl Chloride	75-01-4	1	U	1	5		1
10904	m+p-Xylene	179601-23-1	0.8	U	0.8	5		1
10904	o-Xylene	95-47-6	0.8	U	0.8	5		1
GC/MS Volatiles	**SW-846 8260B SIM**		ug/l		ug/l	ug/l	ug/l	
00527	1,4-Dioxane	123-91-1	0.5	U	0.5	2.0		1
GC Volatiles	**TPH GRO SW-8015B**		ug/l		ug/l	ug/l	ug/l	
08229	TPH-GRO S.CA water C5-C12	n.a.	20	U	20	50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10904	1b Volatile Organics EPA8260	SW-846 8260B	1	L111471AA	05/27/2011 21:44	Kevin A Sposito	1
00527	14b 1,4-Dioxane by 8260B SIM	SW-846 8260B SIM	1	E111461AA	05/26/2011 12:36	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	E111461AA	05/26/2011 12:36	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	L111471AA	05/27/2011 21:44	Kevin A Sposito	1
08229	9b TPH by EPA 8015B Gas C5-C12	TPH GRO SW-8015B	1	11151A20A	05/31/2011 15:27	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	11151A20A	05/31/2011 15:27	Laura M Krieger	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	189	U	189	378		10
	Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	76	U	76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	380		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	76	U	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	76	U	76	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.7	U	3.7	9.4		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.4		5
10138	Anthracene	120-12-7	1.9	U	1.9	9.4		5
10138	Benzo(a)anthracene	56-55-3	7.0	J	3.7	9.4		5
10138	Benzo(a)pyrene	50-32-8	9.4		3.7	9.4		5
10138	Benzo(b)fluoranthene	205-99-2	25		3.7	9.4		5
10138	Benzo(g,h,i)perylene	191-24-2	6.2	J	3.7	9.4		5
10138	Benzo(k)fluoranthene	207-08-9	3.7	U	3.7	9.4		5
10138	Chrysene	218-01-9	9.6		1.9	9.4		5
10138	Dibenz(a,h)anthracene	53-70-3	3.7	U	3.7	9.4		5
10138	Fluoranthene	206-44-0	11		3.7	9.4		5
10138	Fluorene	86-73-7	3.7	U	3.7	9.4		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	5.0	J	3.7	9.4		5
10138	1-Methylnaphthalene	90-12-0	3.7	U	3.7	9.4		5
10138	2-Methylnaphthalene	91-57-6	3.7	U	3.7	9.4		5
10138	Naphthalene	91-20-3	4.2	J	3.7	9.4		5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U	3.7	9.4		5
10138	Phenanthrene	85-01-8	6.5	J	3.7	9.4		5
10138	Pyrene	129-00-0	10		3.7	9.4		5
	Reporting limits were raised due to interference from the sample matrix.							
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67	U	67	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U	45	130	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	89	U	89	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	89	U	89	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	45	U	45	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	45	U	45	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	45	U	45	130	10000000	1
10132	HMX	2691-41-0	110	U	110	330	10000000	1
10132	Nitrobenzene	98-95-3	45	U	45	130	10000000	1
10132	Nitroglycerin	55-63-0	890	U	890	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	89	U	89	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	89	U	89	130	10000000	1
10132	PETN	78-11-5	890	U	890	2,700	10000000	1
10132	RDX	121-82-4	56	U	56	130	10000000	1
10132	Tetryl	479-45-8	68	U	68	130	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	45	U	45	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	45	U	45	130	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1		1
10401	Dalapon	75-99-0	5.0	U	5.0	10		1
10401	2,4-DB	94-82-6	0.70	U	0.70	1.9		1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.4		1
10401	Dinoseb	88-85-7	0.91	U	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.91	U	0.91	1.9		1
10401	MCPA	94-74-6	86	U	86	280		1
10401	MCPP (Mecoprop)	93-65-2	85	U	85	280		1
10401	2,4,5-T	93-76-5	0.093	U	0.093	0.19		1
10401	2,4,5-TP	93-72-1	0.085	U	0.085	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	25a Formaldehyde 8315A	50-00-0	680	U	680	1,700		1
	The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.4	U	2.4	5.7		1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.075	U	0.075	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.95		0.068	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.084	U	0.084	0.19		1
01363	Chlordane	57-74-9	0.91	U	0.91	3.9		1
01363	p,p-DDD	72-54-8	0.075	U	0.075	0.39		1
01363	p,p-DDE	72-55-9	0.38	U	0.38	0.39		1
01363	p,p-DDT	50-29-3	1.4		0.075	0.39		1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.075	U	0.075	0.39		1
01363	Endosulfan I	959-98-8	0.11	U	0.11	0.19		1
01363	Endosulfan II	33213-65-9	0.075	U	0.075	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.075	U	0.075	0.39		1
01363	Endrin	72-20-8	0.075	U	0.075	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.28	U	0.28	0.39		1
01363	Endrin Ketone	53494-70-5	0.075	U	0.075	0.39		1
01363	Heptachlor	76-44-8	0.068	U	0.068	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.11	U	0.11	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.11	U	0.11	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.5		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction were within the QC limits. The original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The concentration of beta-BHC detected in the reextract is .06 ug/kg. The concentration of DDT detected in the reextract is .18 ug/kg. The surrogate recoveries associated with the reextract were outside the lower QC limit.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	11	U	11	38		10

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5442	12642-23-8	11	U	11	38		10
10225	Aroclor 5460	11126-42-4	11	U	11	38		10
10225	PCB-1016	12674-11-2	3.8	U	3.8	19		10
10225	PCB-1221	11104-28-2	3.8	U	3.8	19		10
10225	PCB-1232	11141-16-5	3.8	U	3.8	19		10
10225	PCB-1242	53469-21-9	3.8	U	3.8	19		10
10225	PCB-1248	12672-29-6	3.8	U	3.8	19		10
10225	PCB-1254	11097-69-1	3.8	U	3.8	19		10
10225	PCB-1260	11096-82-5	55		4.4	19		10
10225	PCB-1262	37324-23-5	3.8	U	3.8	19		10
10225	PCB-1268	11100-14-4	3.8	U	3.8	19		10
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	570		1
10501	Isopropanol	67-63-0	110	U	110	570		1
10501	Methanol	67-56-1	110	U	110	570		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.7	U	5.7	11		1
08283	Ethylene glycol	107-21-1	5.7	U	5.7	11		1
08283	Propylene glycol	57-55-6	5.7	U	5.7	11		1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	2.3	U	2.3	6.8		5
10199	EFH (C15-C20)	n.a.	14		2.3	6.8		5
10199	EFH (C21-C30)	n.a.	39		2.3	6.8		5
10199	EFH (C30 - C40)	n.a.	180		2.3	6.8		5
10199	EFH (C8-C11)	n.a.	2.3	U	2.3	6.8		5
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	35,000		5.67	22.5		1
07914	Boron	7440-42-8	2.11	J	1.00	5.63		1
01650	Calcium	7440-70-2	11,500		6.90	22.5		1
01654	Iron	7439-89-6	33,800		10.6	45.1		2
01656	Lithium	7439-93-2	29.7		0.25	2.3		1
01657	Magnesium	7439-95-4	7,710		2.86	11.3		1
06958	Manganese	7439-96-5	396		0.0879	0.563		1
10145	Phosphorus	7723-14-0	332		0.631	11.3		1
01662	Potassium	7440-09-7	4,580		20.3	56.3		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01667	Sodium	7440-23-5	123		42.0	113		1
07968	Strontium	7440-24-6	45.3		0.0698	0.563		1
06969	Tin	7440-31-5	3.06	J	1.13	11.3		1
06970	Titanium	7440-32-6	1,700		0.428	1.13		1
10146	Zirconium	7440-67-7	7.37		0.946	5.63		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.435		0.0663	0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	9.24		0.0884	0.442		2
06126	Barium	7440-39-3	163		0.298	1.10		5
06127	Beryllium	7440-41-7	1.14		0.0177	0.110		2
06128	Cadmium	7440-43-9	0.421		0.0442	0.110		2
06131	Chromium	7440-47-3	29.7		0.133	0.442		2
06132	Cobalt	7440-48-4	11.2		0.0221	0.110		2
06133	Copper	7440-50-8	23.0		0.0729	0.442		2
06135	Lead	7439-92-1	17.9		0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.702		0.0552	0.110		2
06139	Nickel	7440-02-0	31.2		0.110	0.442		2
06141	Selenium	7782-49-2	0.148	J	0.0442	0.442		2
06142	Silver	7440-22-4	0.0755	J	0.0133	0.110		2
06145	Thallium	7440-28-0	0.503		0.0331	0.110		2
06148	Vanadium	7440-62-2	100		0.0243	0.110		2
06149	Zinc	7440-66-6	106		0.619	3.31		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0458	J	0.0031	0.109		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.2		0.91	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	0.91	U	0.91	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.2	U	10.2	34.1		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.93	J	0.23	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.19	U	0.19	0.54		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.10		0.0100	0.0100		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	12.1	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 16:38	Matthew S Woods	10
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 15:11	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 10:23	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/02/2011 23:36	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 08:53	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 10:14	Michele D Hamilton	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 22:11	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 05:47	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 05:50	Richard A Shober	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:28	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 20:36	Dustin A Underkoffler	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 16:22	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 18:33	Heather E Williams	5
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:27	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:58	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:22	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:26	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:26	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:19	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:19	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:19	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:41	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:10	Ashley M Adams	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-015-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-015-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296042
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:10

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL015 SDG#: DE159-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 21:10	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/07/2011 14:55	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 16:10	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:34	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg		ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	56.2		18.8	37.5		1
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	560		1
04688	Anthracene	120-12-7	54	J	19	190		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzo(a)anthracene	56-55-3	380		19	190		1
04688	Benzo(a)pyrene	50-32-8	280		19	190		1
04688	Benzo(b)fluoranthene	205-99-2	420		19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	110	J	19	190		1
04688	Benzoic acid	65-85-0	190	U	190	560		1
04688	Benzyl alcohol	100-51-6	190	U	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190		1
04688	Carbazole	86-74-8	20	J	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190		1
04688	4-Chloroaniline	106-47-8	75	U	75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190		1
04688	Chrysene	218-01-9	380		19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	32	J	19	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560		1
04688	2,4-Dinitrophenol	51-28-5	370	U	370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	370		1
04688	Fluoranthene	206-44-0	470		19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	130	J	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2-Methylphenol	95-48-7	37	U	37	190		1
04688	4-Methylphenol	106-44-5	37	U	37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	37	U	37	190		1
04688	4-Nitroaniline	100-01-6	75	U	75	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	560		1
04688	Phenanthrene	85-01-8	60	J	19	190		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	Pyrene	129-00-0	640		19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
	Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.							
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.7	U	3.7	9.3		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.3		5
10138	Benzo(k)fluoranthene	207-08-9	14		3.7	9.3		5
10138	Fluorene	86-73-7	3.7	U	3.7	9.3		5
10138	1-Methylnaphthalene	90-12-0	3.7	U	3.7	9.3		5
10138	2-Methylnaphthalene	91-57-6	3.7	U	3.7	9.3		5
10138	Naphthalene	91-20-3	3.7	U	3.7	9.3		5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U	3.7	9.3		5
	Reporting limits were raised due to interference from the sample matrix.							
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67	U	67	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U	45	130	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90	U	90	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90	U	90	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	45	U	45	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	45	U	45	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	45	U	45	130	10000000	1
10132	HMX	2691-41-0	110	U	110	340	10000000	1
10132	Nitrobenzene	98-95-3	45	U	45	130	10000000	1
10132	Nitroglycerin	55-63-0	900	U	900	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	90	U	90	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	90	U	90	130	10000000	1
10132	PETN	78-11-5	900	U	900	2,700	10000000	1
10132	RDX	121-82-4	56	U	56	130	10000000	1
10132	Tetryl	479-45-8	69	U	69	130	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	45	U	45	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	45	U	45	130	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0		1
10401	Dalapon	75-99-0	4.9	U	4.9	10		1
10401	2,4-DB	94-82-6	0.69	U	0.69	1.9		1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.3		1
10401	Dinoseb	88-85-7	0.89	U	0.89	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U	0.89	1.9		1
10401	MCPA	94-74-6	85	U	85	280		1
10401	MCPP (Mecoprop)	93-65-2	84	U	84	280		1
10401	2,4,5-T	93-76-5	0.092	U	0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.085	J	0.084	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	25a Formaldehyde 8315A	50-00-0	670	U	670	1,700		1
	The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.074	U	0.074	0.19		1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.19		1
01363	Beta BHC	319-85-7	0.33		0.067	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.056	J	0.038	0.19		1
01363	Chlordane	57-74-9	2.3	J	0.90	3.8		1
01363	p,p-DDD	72-54-8	0.074	U	0.074	0.38		1
01363	p,p-DDE	72-55-9	0.37	U	0.37	0.38		1
01363	p,p-DDT	50-29-3	7.0		0.74	3.8		10
01363	Delta BHC	319-86-8	0.040	U	0.040	0.19		1
01363	Dieldrin	60-57-1	1.6	U	1.6	1.6		1
01363	Endosulfan I	959-98-8	0.049	U	0.049	0.19		1
01363	Endosulfan II	33213-65-9	0.074	U	0.074	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.074	U	0.074	0.38		1
01363	Endrin	72-20-8	0.074	U	0.074	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.074	U	0.074	0.38		1
01363	Endrin Ketone	53494-70-5	0.16	U	0.16	0.38		1
01363	Heptachlor	76-44-8	0.067	U	0.067	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.19	U	0.19	0.19		1
01363	Methoxychlor	72-43-5	0.75	U	0.75	1.9		1
01363	Mirex	2385-85-5	0.074	U	0.074	0.38		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.4		1
	The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
	The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction were within the QC limits. The original data is reported.							
	Reporting limits were raised due to interference from the sample matrix.							
	The concentration of beta-BHC detected in the reextract is .06 ug/kg. The concentration of DDT detected in the reextract is 2.5 ug/kg. The surrogate recoveries associated with the reextract were outside the lower QC limit.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	11	U	11	37		10

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5442	12642-23-8	11	U	11	37		10
10225	Aroclor 5460	11126-42-4	11	U	11	37		10
10225	PCB-1016	12674-11-2	3.7	U	3.7	19		10
10225	PCB-1221	11104-28-2	3.7	U	3.7	19		10
10225	PCB-1232	11141-16-5	3.7	U	3.7	19		10
10225	PCB-1242	53469-21-9	3.7	U	3.7	19		10
10225	PCB-1248	12672-29-6	3.7	U	3.7	19		10
10225	PCB-1254	11097-69-1	3.7	U	3.7	19		10
10225	PCB-1260	11096-82-5	140		4.4	19		10
10225	PCB-1262	37324-23-5	3.7	U	3.7	19		10
10225	PCB-1268	11100-14-4	3.7	U	3.7	19		10
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	560		1
10501	Isopropanol	67-63-0	110	U	110	560		1
10501	Methanol	67-56-1	110	U	110	560		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.6	U	5.6	11		1
08283	Ethylene glycol	107-21-1	5.6	U	5.6	11		1
08283	Propylene glycol	57-55-6	5.6	U	5.6	11		1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	5.3		1.7	3.9		1
10318	o-Terphenyl	84-15-1	1.9	J	1.7	3.9		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	3.9		1
	The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.							
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	4.5	U	4.5	13		10
10199	EFH (C15-C20)	n.a.	8.2	J	4.5	13		10
10199	EFH (C21-C30)	n.a.	95		4.5	13		10
10199	EFH (C30 - C40)	n.a.	450		4.5	13		10
10199	EFH (C8-C11)	n.a.	4.5	U	4.5	13		10
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,400		5.60	22.3		1
07914	Boron	7440-42-8	0.991	U	0.991	5.57		1
01650	Calcium	7440-70-2	12,200		6.83	22.3		1
01654	Iron	7439-89-6	30,900		10.5	44.5		2
01656	Lithium	7439-93-2	26.4		0.25	2.2		1
01657	Magnesium	7439-95-4	7,030		2.83	11.1		1
06958	Manganese	7439-96-5	382		0.0869	0.557		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10145	Phosphorus	7723-14-0	389		0.624	11.1		1
01662	Potassium	7440-09-7	4,340		20.0	55.7		1
01667	Sodium	7440-23-5	129		41.5	111		1
07968	Strontium	7440-24-6	45.1		0.0691	0.557		1
06969	Tin	7440-31-5	2.88	J	1.11	11.1		1
06970	Titanium	7440-32-6	1,530		0.423	1.11		1
10146	Zirconium	7440-67-7	6.61		0.936	5.57		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.300		0.0662	0.221		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.68		0.0882	0.441		2
06126	Barium	7440-39-3	159		0.119	0.441		2
06127	Beryllium	7440-41-7	0.833		0.0176	0.110		2
06128	Cadmium	7440-43-9	0.318		0.0441	0.110		2
06131	Chromium	7440-47-3	28.9		0.132	0.441		2
06132	Cobalt	7440-48-4	10.3		0.0221	0.110		2
06133	Copper	7440-50-8	17.6		0.0728	0.441		2
06135	Lead	7439-92-1	12.7		0.0115	0.221		2
06138	Molybdenum	7439-98-7	0.509		0.0551	0.110		2
06139	Nickel	7440-02-0	21.8		0.110	0.441		2
06141	Selenium	7782-49-2	0.114	J	0.0441	0.441		2
06142	Silver	7440-22-4	0.0617	J	0.0132	0.110		2
06145	Thallium	7440-28-0	0.358		0.0331	0.110		2
06148	Vanadium	7440-62-2	74.2		0.0243	0.110		2
06149	Zinc	7440-66-6	88.4		0.618	3.31		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032	U	0.0032	0.111		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.9		0.90	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.3	J	0.90	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1	U	10.1	33.7		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.70	J	0.22	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.19	U	0.19	0.54		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9045C modified**		Std. Units	Std. Units	Std. Units	Std. Units	
00394	18a pH by 9045C	n.a.	8.24	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	11.1	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 20:39	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 15:38	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 11:01	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 00:18	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 09:03	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 10:41	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 06:28	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 06:41	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 07:23	Richard A Shober	10
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:43	Tyler O Griffin	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 20:49	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 17:07	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 18:58	Heather E Williams	10
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:31	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:01	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:29	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:28	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:28	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:29	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:29	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:29	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:42	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-016-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-016-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296043
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL016 SDG#: DE159-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:24	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 21:24	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 18:54	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 16:22	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:35	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	180	U	180	550		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzo(a)anthracene	56-55-3	130	J	18	180		1
04688	Benzo(a)pyrene	50-32-8	100	J	18	180		1
04688	Benzo(b)fluoranthene	205-99-2	180	J	18	180		1
04688	Benzo(g,h,i)perylene	191-24-2	41	J	18	180		1
04688	Benzoic acid	65-85-0	180	U	180	550		1
04688	Benzyl alcohol	100-51-6	180	U	180	550		1
04688	4-Bromophenyl-phenylether	101-55-3	18	U	18	180		1
04688	Butylbenzylphthalate	85-68-7	28	J	18	180		1
04688	Di-n-butylphthalate	84-74-2	18	U	18	180		1
04688	Carbazole	86-74-8	18	U	18	180		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	180		1
04688	4-Chloroaniline	106-47-8	74	U	74	180		1
04688	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	180		1
04688	bis(2-Chloroethyl)ether	111-44-4	18	U	18	180		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	18	U	18	180		1
04688	2-Chloronaphthalene	91-58-7	18	U	18	180		1
04688	2-Chlorophenol	95-57-8	18	U	18	180		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	180		1
04688	Chrysene	218-01-9	100	J	18	180		1
04688	Dibenz(a,h)anthracene	53-70-3	22	J	18	180		1
04688	Dibenzofuran	132-64-9	18	U	18	180		1
04688	1,2-Dichlorobenzene	95-50-1	18	U	18	180		1
04688	1,3-Dichlorobenzene	541-73-1	18	U	18	180		1
04688	1,4-Dichlorobenzene	106-46-7	18	U	18	180		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	18	U	18	180		1
04688	Diethylphthalate	84-66-2	18	U	18	180		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	180		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	180		1
04688	Dimethylphthalate	131-11-3	18	U	18	180		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550		1
04688	2,4-Dinitrophenol	51-28-5	370	U	370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	180		1
04688	2,6-Dinitrotoluene	606-20-2	18	U	18	180		1
04688	1,2-Diphenylhydrazine	122-66-7	18	U	18	180		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	37	J	18	370		1
04688	Fluoranthene	206-44-0	120	J	18	180		1
04688	Hexachlorobenzene	118-74-1	18	U	18	180		1
04688	Hexachlorobutadiene	87-68-3	74	U	74	180		1
04688	Hexachlorocyclopentadiene	77-47-4	180	U	180	550		1
04688	Hexachloroethane	67-72-1	18	U	18	180		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	53	J	18	180		1
04688	Isophorone	78-59-1	18	U	18	180		1
04688	2-Methylphenol	95-48-7	37	U	37	180		1
04688	4-Methylphenol	106-44-5	37	U	37	180		1

3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2-Nitroaniline	88-74-4	18	U	18	180		1
04688	3-Nitroaniline	99-09-2	37	U	37	180		1
04688	4-Nitroaniline	100-01-6	74	U	74	180		1
04688	Nitrobenzene	98-95-3	18	U	18	180		1
04688	2-Nitrophenol	88-75-5	18	U	18	180		1
04688	4-Nitrophenol	100-02-7	180	U	180	550		1
04688	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	180		1
04688	N-Nitrosodiphenylamine	86-30-6	18	U	18	180		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	18	U	18	180		1
04688	Pentachlorophenol	87-86-5	180	U	180	550		1
04688	Phenol	108-95-2	18	U	18	180		1
04688	Pyrene	129-00-0	170	J	18	180		1
04688	1,2,4-Trichlorobenzene	120-82-1	18	U	18	180		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	180		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	180		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
	Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved under the sample analysis conditions. The result reported for benzo(b)fluoranthene represents the combined total of both isomers.							

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.7	U	3.7	9.3		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.3		5
10138	Anthracene	120-12-7	2.2	J	1.9	9.3		5
10138	Benzo(k)fluoranthene	207-08-9	18		3.7	9.3		5
10138	Fluorene	86-73-7	3.7	U	3.7	9.3		5
10138	1-Methylnaphthalene	90-12-0	3.7	U	3.7	9.3		5
10138	2-Methylnaphthalene	91-57-6	3.7	U	3.7	9.3		5
10138	Naphthalene	91-20-3	3.7	U	3.7	9.3		5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U	3.7	9.3		5
10138	Phenanthrene	85-01-8	5.9	J	3.7	9.3		5
	Reporting limits were raised due to interference from the sample matrix.							

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0		1
10401	Dalapon	75-99-0	4.9	U	4.9	10		1
10401	2,4-DB	94-82-6	0.69	U	0.69	1.9		1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.3		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	Dinoseb	88-85-7	0.89	U	0.89	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.89	U	0.89	1.9		1
10401	MCPA	94-74-6	97	J	85	280		1
10401	MCPP (Mecoprop)	93-65-2	84	U	84	280		1
10401	2,4,5-T	93-76-5	0.22		0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.18	J	0.084	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.074	U	0.074	0.18		1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.18		1
01363	Beta BHC	319-85-7	0.067	U	0.067	0.18		1
01363	Gamma BHC - Lindane	58-89-9	0.038	U	0.038	0.18		1
01363	Chlordane	57-74-9	0.89	U	0.89	3.8		1
01363	p,p-DDD	72-54-8	0.074	U	0.074	0.38		1
01363	p,p-DDE	72-55-9	0.49	U	0.49	0.49		1
01363	p,p-DDT	50-29-3	12		0.74	3.8		10
01363	Delta BHC	319-86-8	0.040	U	0.040	0.18		1
01363	Dieldrin	60-57-1	2.2	U	2.2	3.8		10
01363	Endosulfan I	959-98-8	0.049	U	0.049	0.18		1
01363	Endosulfan II	33213-65-9	0.074	U	0.074	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.074	U	0.074	0.38		1
01363	Endrin	72-20-8	0.074	U	0.074	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.074	U	0.074	0.38		1
01363	Endrin Ketone	53494-70-5	0.074	U	0.074	0.38		1
01363	Heptachlor	76-44-8	0.067	U	0.067	0.18		1
01363	Heptachlor Epoxide	1024-57-3	0.28	U	0.28	0.28		1
01363	Methoxychlor	72-43-5	1.1	U	1.1	1.8		1
01363	Mirex	2385-85-5	0.48	U	0.48	0.48		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.4		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction were within the QC limits. The original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The concentration of DDT detected in the reextract is 7.0 ug/kg.

The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	5.6	U	5.6	18		5
10225	Aroclor 5442	12642-23-8	5.6	U	5.6	18		5
10225	Aroclor 5460	11126-42-4	5.6	U	5.6	18		5
10225	PCB-1016	12674-11-2	1.8	U	1.8	9.5		5
10225	PCB-1221	11104-28-2	1.8	U	1.8	9.5		5
10225	PCB-1232	11141-16-5	1.8	U	1.8	9.5		5
10225	PCB-1242	53469-21-9	1.8	U	1.8	9.5		5
10225	PCB-1248	12672-29-6	1.8	U	1.8	9.5		5
10225	PCB-1254	11097-69-1	1.8	U	1.8	9.5		5
10225	PCB-1260	11096-82-5	32		2.2	9.5		5
10225	PCB-1262	37324-23-5	1.8	U	1.8	9.5		5
10225	PCB-1268	11100-14-4	1.8	U	1.8	9.5		5
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	29,000		5.58	22.2		1
07914	Boron	7440-42-8	0.987	U	0.987	5.54		1
01650	Calcium	7440-70-2	12,200		6.80	22.2		1
01654	Iron	7439-89-6	32,400		10.4	44.3		2
01656	Lithium	7439-93-2	25.5		0.24	2.2		1
01657	Magnesium	7439-95-4	6,910		2.82	11.1		1
06958	Manganese	7439-96-5	393		0.0865	0.554		1
10145	Phosphorus	7723-14-0	454		0.621	11.1		1
01662	Potassium	7440-09-7	4,510		20.0	55.4		1
01667	Sodium	7440-23-5	129		41.4	111		1
07968	Strontium	7440-24-6	45.2		0.0687	0.554		1
06969	Tin	7440-31-5	2.96	J	1.11	11.1		1
06970	Titanium	7440-32-6	1,500		0.421	1.11		1
10146	Zirconium	7440-67-7	5.80		0.931	5.54		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.365		0.0652	0.217		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.77		0.0870	0.435		2
06126	Barium	7440-39-3	140		0.117	0.435		2
06127	Beryllium	7440-41-7	0.880		0.0174	0.109		2
06128	Cadmium	7440-43-9	0.391		0.0435	0.109		2
06131	Chromium	7440-47-3	25.4		0.130	0.435		2
06132	Cobalt	7440-48-4	9.01		0.0217	0.109		2
06133	Copper	7440-50-8	24.4		0.0718	0.435		2
06135	Lead	7439-92-1	17.4		0.0113	0.217		2
06138	Molybdenum	7439-98-7	0.929		0.0544	0.109		2
06139	Nickel	7440-02-0	25.5		0.109	0.435		2
06141	Selenium	7782-49-2	0.116	J	0.0435	0.435		2
06142	Silver	7440-22-4	0.0786	J	0.0130	0.109		2
06145	Thallium	7440-28-0	0.449		0.0326	0.109		2
06148	Vanadium	7440-62-2	90.3		0.0239	0.109		2
06149	Zinc	7440-66-6	133		0.609	3.26		2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals		**SW-846 7471A**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury		7439-97-6	0.0031 U	0.0031	0.109		1
Wet Chemistry		**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride		16984-48-8	2.0	0.90	1.1		1
		EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0		14797-73-0	10.1 U	10.1	33.6		1
		SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199		18540-29-9	0.38 J	0.22	1.1		1
		SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C		n.a.	8.10	0.0100	0.0100		1
Wet Chemistry		**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	Moisture Content by 160.3 "Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.		n.a.	10.7	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 16:04	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 11:32	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 11:09	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 07:07	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 07:21	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 07:41	Richard A Shober	5
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 09:02	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:43	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:51	David K Beck	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:51	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:51	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:06	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:06	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:06	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:01	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:38	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 19:16	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 16:27	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-017-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-017-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296044
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 12:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL017 SDG#: DE159-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403A	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	193	U	193	385		10
	Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	580		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	580		1
04688	Benzyl alcohol	100-51-6	190	U	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	21	J	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580		1
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	380		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	580		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.8	U	3.8	9.6		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.6		5
10138	Anthracene	120-12-7	1.9	U	1.9	9.6		5
10138	Benzo(a)anthracene	56-55-3	5.2	J	3.8	9.6		5
10138	Benzo(a)pyrene	50-32-8	6.2	J	3.8	9.6		5
10138	Benzo(b)fluoranthene	205-99-2	12		3.8	9.6		5
10138	Benzo(g,h,i)perylene	191-24-2	4.8	J	3.8	9.6		5
10138	Benzo(k)fluoranthene	207-08-9	4.6	J	3.8	9.6		5
10138	Chrysene	218-01-9	6.8	J	1.9	9.6		5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U	3.8	9.6		5
10138	Fluoranthene	206-44-0	11		3.8	9.6		5
10138	Fluorene	86-73-7	3.8	U	3.8	9.6		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U	3.8	9.6		5
10138	1-Methylnaphthalene	90-12-0	3.8	U	3.8	9.6		5
10138	2-Methylnaphthalene	91-57-6	3.8	U	3.8	9.6		5
10138	Naphthalene	91-20-3	3.8	U	3.8	9.6		5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U	3.8	9.6		5
10138	Phenanthrene	85-01-8	7.2	J	3.8	9.6		5
10138	Pyrene	129-00-0	8.4	J	3.8	9.6		5
	Reporting limits were raised due to interference from the sample matrix.							
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67	U	67	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U	45	130	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	89	U	89	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	89	U	89	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	45	U	45	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	45	U	45	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	45	U	45	130	10000000	1
10132	HMX	2691-41-0	110	U	110	330	10000000	1
10132	Nitrobenzene	98-95-3	45	U	45	130	10000000	1
10132	Nitroglycerin	55-63-0	890	U	890	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	89	U	89	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	89	U	89	130	10000000	1
10132	PETN	78-11-5	890	U	890	2,700	10000000	1
10132	RDX	121-82-4	56	U	56	130	10000000	1
10132	Tetryl	479-45-8	68	U	68	130	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	45	U	45	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	45	U	45	130	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U	1.4	4.2		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	0.72	U	0.72	2.0		1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.93	U	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93	U	0.93	2.0		1
10401	MCPA	94-74-6	88	U	88	290		1
10401	MCPP (Mecoprop)	93-65-2	87	U	87	290		1
10401	2,4,5-T	93-76-5	0.095	U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.087	U	0.087	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	25a Formaldehyde 8315A	50-00-0	680	U	680	1,700		1
	The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069	U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	0.92	U	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.076	U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.12	U	0.12	0.39		1
01363	p,p-DDT	50-29-3	0.70		0.076	0.39		1
01363	Delta BHC	319-86-8	0.042	U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.076	U	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076	U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076	U	0.076	0.39		1
01363	Endrin	72-20-8	0.076	U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.10	U	0.10	0.39		1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069	U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039	U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.21	U	0.21	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1
	The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
	The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.							
	DDT was not detected in the reextract.							
	Reporting limits were raised due to interference from the sample matrix.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	1.5	J	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	2.0		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	2.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1242	53469-21-9	0.38	U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0		1
10225	PCB-1260	11096-82-5	5.8		0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	120	U	120	580		1
10501	Isopropanol	67-63-0	120	U	120	580		1
10501	Methanol	67-56-1	120	U	120	580		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.8	U	5.8	12		1
08283	Ethylene glycol	107-21-1	5.8	U	5.8	12		1
08283	Propylene glycol	57-55-6	5.8	U	5.8	12		1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.1		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.1		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.1		1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.93	U	0.93	2.8		2
10199	EFH (C15-C20)	n.a.	5.4		0.93	2.8		2
10199	EFH (C21-C30)	n.a.	21		0.93	2.8		2
10199	EFH (C30 - C40)	n.a.	61		0.93	2.8		2
10199	EFH (C8-C11)	n.a.	0.93	U	0.93	2.8		2
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	36,100		5.67	22.5		1
07914	Boron	7440-42-8	1.80	J	1.00	5.63		1
01650	Calcium	7440-70-2	11,000		6.90	22.5		1
01654	Iron	7439-89-6	34,200		10.6	45.1		2
01656	Lithium	7439-93-2	30.7		0.25	2.3		1
01657	Magnesium	7439-95-4	7,900		2.86	11.3		1
06958	Manganese	7439-96-5	433		0.0879	0.563		1
10145	Phosphorus	7723-14-0	297		0.631	11.3		1
01662	Potassium	7440-09-7	4,540		20.3	56.3		1
01667	Sodium	7440-23-5	188		42.0	113		1
07968	Strontium	7440-24-6	49.1		0.0698	0.563		1
06969	Tin	7440-31-5	3.04	J	1.13	11.3		1
06970	Titanium	7440-32-6	1,680		0.428	1.13		1
10146	Zirconium	7440-67-7	7.71		0.946	5.63		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.383	0.0682	0.227		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	8.55	0.0910	0.455		2
06126	Barium	7440-39-3	183	0.307	1.14		5
06127	Beryllium	7440-41-7	1.15	0.0182	0.114		2
06128	Cadmium	7440-43-9	0.417	0.0455	0.114		2
06131	Chromium	7440-47-3	32.6	0.136	0.455		2
06132	Cobalt	7440-48-4	10.2	0.0227	0.114		2
06133	Copper	7440-50-8	22.0	0.0751	0.455		2
06135	Lead	7439-92-1	14.7	0.0118	0.227		2
06138	Molybdenum	7439-98-7	0.636	0.0569	0.114		2
06139	Nickel	7440-02-0	29.4	0.114	0.455		2
06141	Selenium	7782-49-2	0.144 J	0.0455	0.455		2
06142	Silver	7440-22-4	0.0757 J	0.0136	0.114		2
06145	Thallium	7440-28-0	0.497	0.0341	0.114		2
06148	Vanadium	7440-62-2	98.3	0.0250	0.114		2
06149	Zinc	7440-66-6	96.9	0.637	3.41		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0031 U	0.0031	0.110		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	6.2	0.93	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	2.0	0.93	1.7		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4 U	10.4	34.8		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.84 J	0.23	1.2		1
	SW-846 9012B		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.57		1
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.14	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	13.8	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 16:55	Matthew S Woods	10
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 16:31	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 12:02	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 02:26	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 09:13	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 11:37	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 07:48	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:00	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 21:58	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:02	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 14:52	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 18:08	Heather E Williams	2
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:34	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-019-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:05	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:25	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:30	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:30	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:32	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:32	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:32	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:43	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202A	05/31/2011 21:52	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202A	05/31/2011 21:52	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201A	06/05/2011 19:38	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 16:39	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:36	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202A	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201A	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: **SL-019-SA5DN-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-019-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296045
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:30

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL019 SDG#: DE159-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	194	U	194	388		10
	Reporting limits were raised due to interference from the sample matrix.							
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	580		1
04688	Benzidine	92-87-5	1,400	U	1,400	3,900		1
04688	Benzoic acid	65-85-0	190	U	190	580		1
04688	Benzyl alcohol	100-51-6	190	U	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	190		1
04688	4-Chloroaniline	106-47-8	78	U	78	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580		1
04688	2,4-Dinitrophenol	51-28-5	390	U	390	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	78	U	78	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	39	U	39	190		1
04688	4-Methylphenol	106-44-5	39	U	39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	39	U	39	190		1
04688	4-Nitroaniline	100-01-6	78	U	78	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	580		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.42	J	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	1.7	J	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	3.1		0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	4.9		0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	1.7	J	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	5.4		0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21		1
10138	Chrysene	218-01-9	3.1		0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.9	U	6.9	21		1
10138	Fluoranthene	206-44-0	4.5		0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	1.6	J	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76	U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21		1
10138	Phenanthrene	85-01-8	1.9	J	0.76	1.9		1
10138	Pyrene	129-00-0	3.5		0.76	1.9		1
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	68	U	68	140	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	46	U	46	140	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	91	U	91	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	91	U	91	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	46	U	46	140	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	46	U	46	140	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	46	U	46	140	10000000	1
10132	HMX	2691-41-0	110	U	110	340	10000000	1
10132	Nitrobenzene	98-95-3	46	U	46	140	10000000	1
10132	Nitroglycerin	55-63-0	910	U	910	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	91	U	91	140	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	140	10000000	1
10132	4-Nitrotoluene	99-99-0	91	U	91	140	10000000	1
10132	PETN	78-11-5	910	U	910	2,700	10000000	1
10132	RDX	121-82-4	57	U	57	140	10000000	1
10132	Tetryl	479-45-8	70	U	70	140	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	46	U	46	140	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	46	U	46	140	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U	1.4	4.2		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	0.72	U	0.72	2.0		1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.93	U	0.93	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.93	U	0.93	2.0		1
10401	MCPA	94-74-6	100	J	88	290		1
10401	MCPP (Mecoprop)	93-65-2	87	U	87	290		1
10401	2,4,5-T	93-76-5	0.095	U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.087	U	0.087	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		ug/kg		ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	700	U	700	1,700		1
	The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.077	U	0.077	0.19		1
01363	Alpha BHC	319-84-6	0.040	U	0.040	0.19		1
01363	Beta BHC	319-85-7	0.070	U	0.070	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.040	U	0.040	0.19		1
01363	Chlordane	57-74-9	1.1	J	0.93	4.0		1
01363	p,p-DDD	72-54-8	0.077	U	0.077	0.40		1
01363	p,p-DDE	72-55-9	0.12	U	0.12	0.40		1
01363	p,p-DDT	50-29-3	1.0		0.077	0.40		1
01363	Delta BHC	319-86-8	0.042	U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.077	U	0.077	0.40		1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.26	U	0.26	0.40		1
01363	Endosulfan Sulfate	1031-07-8	0.077	U	0.077	0.40		1
01363	Endrin	72-20-8	0.094	U	0.094	0.40		1
01363	Endrin Aldehyde	7421-93-4	0.094	U	0.094	0.40		1
01363	Endrin Ketone	53494-70-5	0.077	U	0.077	0.40		1
01363	Heptachlor	76-44-8	0.070	U	0.070	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.047	U	0.047	0.19		1
01363	Methoxychlor	72-43-5	0.40	U	0.40	1.9		1
01363	Mirex	2385-85-5	0.10	U	0.10	0.40		1
01363	Toxaphene	8001-35-2	2.6	U	2.6	7.7		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The concentration of DDT detected in the reextract is .24 ug/kg. Chlordane was not detected in the reextract.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	9.7		1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	2.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1232	11141-16-5	0.38	U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0		1
10225	PCB-1260	11096-82-5	6.8		0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	120	U	120	580		1
10501	Isopropanol	67-63-0	120	U	120	580		1
10501	Methanol	67-56-1	120	U	120	580		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.8	U	5.8	12		1
08283	Ethylene glycol	107-21-1	5.8	U	5.8	12		1
08283	Propylene glycol	57-55-6	5.8	U	5.8	12		1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.1		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.1		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.1		1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.47	U	0.47	1.4		1
10199	EFH (C15-C20)	n.a.	3.9		0.47	1.4		1
10199	EFH (C21-C30)	n.a.	20		0.47	1.4		1
10199	EFH (C30 - C40)	n.a.	26		0.47	1.4		1
10199	EFH (C8-C11)	n.a.	0.47	U	0.47	1.4		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	38,800		5.80	23.1		1
07914	Boron	7440-42-8	1.71	J	1.03	5.76		1
01650	Calcium	7440-70-2	9,700		7.07	23.1		1
01654	Iron	7439-89-6	34,400		10.9	46.1		2
01656	Lithium	7439-93-2	32.3		0.25	2.3		1
01657	Magnesium	7439-95-4	8,080		2.93	11.5		1
06958	Manganese	7439-96-5	370		0.0899	0.576		1
10145	Phosphorus	7723-14-0	239		0.645	11.5		1
01662	Potassium	7440-09-7	4,470		20.7	57.6		1
01667	Sodium	7440-23-5	163		43.0	115		1
07968	Strontium	7440-24-6	46.6		0.0715	0.576		1
06969	Tin	7440-31-5	2.96	J	1.15	11.5		1
06970	Titanium	7440-32-6	1,700		0.438	1.15		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10146	Zirconium	7440-67-7	7.90		0.968	5.76		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.351		0.0685	0.228		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.36		0.0913	0.457		2
06126	Barium	7440-39-3	204		0.123	0.457		2
06127	Beryllium	7440-41-7	1.02		0.0183	0.114		2
06128	Cadmium	7440-43-9	0.458		0.0457	0.114		2
06131	Chromium	7440-47-3	29.2		0.137	0.457		2
06132	Cobalt	7440-48-4	9.04		0.0228	0.114		2
06133	Copper	7440-50-8	21.0		0.0753	0.457		2
06135	Lead	7439-92-1	14.7		0.0119	0.228		2
06138	Molybdenum	7439-98-7	0.632		0.0571	0.114		2
06139	Nickel	7440-02-0	28.4		0.114	0.457		2
06141	Selenium	7782-49-2	0.104	J	0.0457	0.457		2
06142	Silver	7440-22-4	0.0740	J	0.0137	0.114		2
06145	Thallium	7440-28-0	0.463		0.0342	0.114		2
06148	Vanadium	7440-62-2	96.6		0.0251	0.114		2
06149	Zinc	7440-66-6	89.9		0.639	3.42		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032	U	0.0032	0.111		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	5.6		0.93	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.5	J	0.93	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.5	U	10.5	34.9		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.81	J	0.23	1.2		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.56		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.09		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	14.1		0.50	0.50		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 17:13	Matthew S Woods	10
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 16:58	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 17:23	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 03:08	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 09:22	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 12:04	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 08:15	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:18	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:13	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:15	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 15:37	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 17:18	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:38	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:08	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:35	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:31	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:31	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:35	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:35	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:35	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:45	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 23:18	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 23:18	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 21:28	William L Hamaker Jr	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-021-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-021-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296046
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 11:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL021 SDG#: DE159-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 16:50	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:37	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	19.1	U	19.1	38.3		1
	The surrogate recoveries are outside of QC limits. The matrix spike sample was analyzed and surrogate recoveries are again outside of QC limits, indicating a matrix effect.							
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	27	J	19	380		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	0.76	U	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	0.76	U	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	2.0		0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	0.76	U	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.9	U	6.9	21		1
10138	Di-n-butylphthalate	84-74-2	6.9	U	6.9	21		1
10138	Chrysene	218-01-9	0.96	J	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.9	U	6.9	21		1
10138	Dimethylphthalate	131-11-3	6.9	U	6.9	21		1
10138	Fluoranthene	206-44-0	0.76	U	0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	U	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76	U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.9	U	6.9	21		1
10138	Phenanthrene	85-01-8	0.76	U	0.76	1.9		1
10138	Pyrene	129-00-0	0.76	U	0.76	1.9		1
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	68	U	68	140	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U	45	140	10000000	1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90	U	90	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90	U	90	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	45	U	45	140	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	45	U	45	140	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	45	U	45	140	10000000	1
10132	HMX	2691-41-0	110	U	110	340	10000000	1
10132	Nitrobenzene	98-95-3	45	U	45	140	10000000	1
10132	Nitroglycerin	55-63-0	900	U	900	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	90	U	90	140	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	140	10000000	1
10132	4-Nitrotoluene	99-99-0	90	U	90	140	10000000	1
10132	PETN	78-11-5	900	U	900	2,700	10000000	1
10132	RDX	121-82-4	56	U	56	140	10000000	1
10132	Tetryl	479-45-8	69	U	69	140	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	45	U	45	140	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	45	U	45	140	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	0.71	U	0.71	2.0		1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.92	U	0.92	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U	0.92	2.0		1
10401	MCPA	94-74-6	87	U	87	290		1
10401	MCPP (Mecoprop)	93-65-2	86	U	86	290		1
10401	2,4,5-T	93-76-5	0.094	U	0.094	0.20		1
10401	2,4,5-TP	93-72-1	0.16	J	0.086	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	the lowest reporting limits attainable.							
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	25a Formaldehyde 8315A	50-00-0	690	U	690	1,700		1
	The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069	U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	0.98	J	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.076	U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.076	U	0.076	0.39		1
01363	p,p-DDT	50-29-3	0.52		0.076	0.39		1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.11	J	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.050	U	0.050	0.19		1
01363	Endosulfan II	33213-65-9	0.076	U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076	U	0.076	0.39		1
01363	Endrin	72-20-8	0.076	U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.076	U	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069	U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039	U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.12	J	0.076	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1
	The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
	The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.							
	The concentration of DDT detected in the reextract is .17 ug/kg. The surrogate recoveries associated with the reextract were outside the lower QC limit.							
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1242	53469-21-9	0.38	U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9		1
10225	PCB-1260	11096-82-5	0.45	U	0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	570		1
10501	Isopropanol	67-63-0	110	U	110	570		1
10501	Methanol	67-56-1	110	U	110	570		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.7	U	5.7	11		1
08283	Ethylene glycol	107-21-1	5.7	U	5.7	11		1
08283	Propylene glycol	57-55-6	5.7	U	5.7	11		1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	4.6	U	4.6	14		10
10199	EFH (C15-C20)	n.a.	6.4	J	4.6	14		10
10199	EFH (C21-C30)	n.a.	60		4.6	14		10
10199	EFH (C30 - C40)	n.a.	290		4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6	U	4.6	14		10
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,200		5.66	22.5		1
07914	Boron	7440-42-8	2.82	J	1.00	5.63		1
01650	Calcium	7440-70-2	18,500		6.90	22.5		1
01654	Iron	7439-89-6	32,000		10.6	45.0		2
01656	Lithium	7439-93-2	26.1		0.25	2.3		1
01657	Magnesium	7439-95-4	6,650		2.86	11.3		1
06958	Manganese	7439-96-5	451		0.0878	0.563		1
10145	Phosphorus	7723-14-0	357		0.630	11.3		1
01662	Potassium	7440-09-7	4,400		20.3	56.3		1
01667	Sodium	7440-23-5	143		42.0	113		1
07968	Strontium	7440-24-6	41.8		0.0698	0.563		1
06969	Tin	7440-31-5	3.22	J	1.13	11.3		1
06970	Titanium	7440-32-6	1,660		0.428	1.13		1
10146	Zirconium	7440-67-7	6.98		0.945	5.63		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.510		0.0682	0.227		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.16		0.0909	0.455		2
06126	Barium	7440-39-3	199		0.123	0.455		2
06127	Beryllium	7440-41-7	1.01		0.0182	0.114		2
06128	Cadmium	7440-43-9	0.727		0.0455	0.114		2
06131	Chromium	7440-47-3	30.1		0.136	0.455		2
06132	Cobalt	7440-48-4	13.0		0.0227	0.114		2
06133	Copper	7440-50-8	22.8		0.0750	0.455		2
06135	Lead	7439-92-1	20.0		0.0118	0.227		2
06138	Molybdenum	7439-98-7	1.50		0.0568	0.114		2
06139	Nickel	7440-02-0	28.9		0.114	0.455		2
06141	Selenium	7782-49-2	0.232	J	0.0455	0.455		2
06142	Silver	7440-22-4	0.0712	J	0.0136	0.114		2
06145	Thallium	7440-28-0	0.491		0.0341	0.114		2
06148	Vanadium	7440-62-2	91.4		0.0250	0.114		2
06149	Zinc	7440-66-6	162		0.637	3.41		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0463	J	0.0032	0.110		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.7		0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.6	J	0.92	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.4		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.74	J	0.23	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.55		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.04		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	12.9		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 21:32	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 05:37	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 15:55	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 03:50	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 09:32	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 08:51	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 08:43	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:37	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:28	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:28	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 17:52	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 19:23	Heather E Williams	10
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:06	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:26	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 06:58	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:02	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:02	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 06:58	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 06:58	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 06:58	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/07/2011 00:02	David K Beck	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:46	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 22:07	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 22:07	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 20:00	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 17:07	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:41	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: **SL-022-SA5DN-SS-0.0-0.5 Soil**
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296047
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13BKG

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg		ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	229		19.1	38.3		1
The surrogate recoveries are outside of QC limits. The background sample was analyzed and surrogate recoveries are again outside of QC limits, indicating a matrix effect.								
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,800		19	190		1
04688	Acenaphthylene	208-96-8	1,900		19	190		1
04688	Aniline	62-53-3	1,400		190	570		1
04688	Anthracene	120-12-7	1,900		19	190		1
04688	Benzidine	92-87-5	2,500	J	1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,900		19	190		1
04688	Benzo(a)pyrene	50-32-8	1,900		19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,900		19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,900		19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,800		19	190		1
04688	Benzoic acid	65-85-0	1,100		190	570		1
04688	Benzyl alcohol	100-51-6	2,100		190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	1,700		19	190		1
04688	Butylbenzylphthalate	85-68-7	2,100		19	190		1
04688	Di-n-butylphthalate	84-74-2	1,800		19	190		1
04688	Carbazole	86-74-8	1,900		19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	2,100		38	190		1
04688	4-Chloroaniline	106-47-8	1,500		76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,700		19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,700		19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,600		19	190		1
04688	2-Chloronaphthalene	91-58-7	2,700		19	190		1
04688	2-Chlorophenol	95-57-8	1,900		19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900		38	190		1
04688	Chrysene	218-01-9	1,900		19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,900		19	190		1
04688	Dibenzofuran	132-64-9	1,900		19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,500		19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,400		19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,500		19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,500		110	380		1
04688	2,4-Dichlorophenol	120-83-2	2,000		19	190		1
04688	Diethylphthalate	84-66-2	1,900		19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,800		38	190		1
04688	3,5-Dimethylphenol	108-68-9	2,000		38	190		1
04688	Dimethylphthalate	131-11-3	1,800		19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,500		190	570		1
04688	2,4-Dinitrophenol	51-28-5	2,500		380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	2,100		38	190		1
04688	2,6-Dinitrotoluene	606-20-2	1,900		19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	1,800		19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,200		19	380		1
04688	Fluoranthene	206-44-0	1,700		19	190		1
04688	Fluorene	86-73-7	1,900		19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorobenzene	118-74-1	1,800	19	190		1
04688	Hexachlorobutadiene	87-68-3	1,300	76	190		1
04688	Hexachlorocyclopentadiene	77-47-4	2,600	190	570		1
04688	Hexachloroethane	67-72-1	1,400	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	1,900	19	190		1
04688	Isophorone	78-59-1	1,800	19	190		1
04688	1-Methylnaphthalene	90-12-0	1,800	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,700	19	190		1
04688	2-Methylphenol	95-48-7	1,900	38	190		1
04688	4-Methylphenol	106-44-5	2,100	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,700	19	190		1
04688	2-Nitroaniline	88-74-4	2,100	19	190		1
04688	3-Nitroaniline	99-09-2	2,100	38	190		1
04688	4-Nitroaniline	100-01-6	1,700	76	190		1
04688	Nitrobenzene	98-95-3	1,700	19	190		1
04688	2-Nitrophenol	88-75-5	1,900	19	190		1
04688	4-Nitrophenol	100-02-7	1,800	190	570		1
04688	N-Nitrosodimethylamine	62-75-9	1,600	38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	1,800	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,900	19	190		1
04688	Pentachlorophenol	87-86-5	1,600	190	570		1
04688	Phenanthrene	85-01-8	1,800	19	190		1
04688	Phenol	108-95-2	2,000	19	190		1
04688	Pyrene	129-00-0	2,100	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,600	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	1,900	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	1,900	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene						
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	39	0.76	1.9		1
10138	Acenaphthylene	208-96-8	38	0.38	1.9		1
10138	Anthracene	120-12-7	40	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	37	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	48	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	53	0.76	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Benzo(g,h,i)perylene	191-24-2	32		0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	49		0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	40		6.9	21		1
10138	Di-n-butylphthalate	84-74-2	47		6.9	21		1
10138	Chrysene	218-01-9	38		0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	37		0.76	1.9		1
10138	Diethylphthalate	84-66-2	41		6.9	21		1
10138	Dimethylphthalate	131-11-3	40		6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	39		6.9	21		1
10138	Fluoranthene	206-44-0	43		0.76	1.9		1
10138	Fluorene	86-73-7	40		0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	35		0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	39		0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	35		0.76	1.9		1
10138	Naphthalene	91-20-3	37		0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	39		0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	53		6.9	21		1
10138	Phenanthrene	85-01-8	39		0.76	1.9		1
10138	Pyrene	129-00-0	34		0.76	1.9		1
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	2,600		69	140		1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	2,600		46	140		1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	92	U	92	280		1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	92	U	92	280		1
10132	1,3-Dinitrobenzene	99-65-0	2,700		46	140		1
10132	2,4-Dinitrotoluene	121-14-2	2,500		46	140		1
10132	2,6-Dinitrotoluene	606-20-2	2,500		46	140		1
10132	HMX	2691-41-0	2,300		110	340		1
10132	Nitrobenzene	98-95-3	2,600		46	140		1
10132	Nitroglycerin	55-63-0	56,000		920	2,800		1
10132	2-Nitrotoluene	88-72-2	2,400		92	140		1
10132	3-Nitrotoluene	99-08-1	2,600		110	140		1
10132	4-Nitrotoluene	99-99-0	2,400		92	140		1
10132	PETN	78-11-5	70,000		920	2,800		1
10132	RDX	121-82-4	2,100		57	140		1
10132	Tetryl	479-45-8	2,100		70	140		1
10132	1,3,5-Trinitrobenzene	99-35-4	2,500		46	140		1
10132	2,4,6-Trinitrotoluene	118-96-7	2,600		46	140		1
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	9.7		1.4	4.1		1
10401	Dalapon	75-99-0	14		5.0	10		1
10401	2,4-DB	94-82-6	5.9		0.71	1.9		1
10401	Dicamba	1918-00-9	0.82	J	0.46	1.4		1
10401	Dinoseb	88-85-7	1.4	J	0.92	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	9.6		0.92	1.9		1
10401	MCPA	94-74-6	850		87	290		1
10401	MCPP (Mecoprop)	93-65-2	670		86	290		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4,5-T	93-76-5	0.67		0.094	0.20		1
10401	2,4,5-TP	93-72-1	0.72		0.086	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

HPLC Organics	**SW-846 8315A**		ug/kg		ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	4,500		690	1,700		1

The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.

Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.15	J	0.076	0.20		1
01363	Alpha BHC	319-84-6	0.22		0.039	0.20		1
01363	Beta BHC	319-85-7	0.17	J	0.069	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.24		0.039	0.20		1
01363	Chlordane	57-74-9	0.92	U	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.39		0.076	0.39		1
01363	p,p-DDE	72-55-9	0.46		0.076	0.39		1
01363	p,p-DDT	50-29-3	1.2		0.076	0.39		1
01363	Delta BHC	319-86-8	0.18	J	0.041	0.20		1
01363	Dieldrin	60-57-1	0.57		0.076	0.39		1
01363	Endosulfan I	959-98-8	0.14	J	0.051	0.20		1
01363	Endosulfan II	33213-65-9	0.23	J	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.42		0.076	0.39		1
01363	Endrin	72-20-8	0.37	J	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.30	J	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.25	J	0.076	0.39		1
01363	Heptachlor	76-44-8	0.26		0.069	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.16	J	0.039	0.20		1
01363	Methoxychlor	72-43-5	2.9		0.39	1.9		1
01363	Mirex	2385-85-5	0.076	U	0.076	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5460	11126-42-4	2.2	J	1.1	3.8		1
10225	PCB-1016	12674-11-2	17		0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	1.9		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9		1
10225	PCB-1260	11096-82-5	19		0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	1,900		110	570		1
10501	Isopropanol	67-63-0	2,000		110	570		1
10501	Methanol	67-56-1	2,000		110	570		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	96		5.7	11		1
08283	Ethylene glycol	107-21-1	160		5.7	11		1
08283	Propylene glycol	57-55-6	160		5.7	11		1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.6	J	1.5	4.0		1
10318	o-Terphenyl	84-15-1	1.9	J	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.8	J	1.7	4.0		1
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.								
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	4.6	U	4.6	14		10
10199	EFH (C15-C20)	n.a.	7.0	J	4.6	14		10
10199	EFH (C21-C30)	n.a.	55		4.6	14		10
10199	EFH (C30 - C40)	n.a.	240		4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6	U	4.6	14		10
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	33,500		5.55	22.1		1
07914	Boron	7440-42-8	220		0.983	5.52		1
01650	Calcium	7440-70-2	8,290		6.77	22.1		1
01654	Iron	7439-89-6	32,800		10.4	44.2		2
01656	Lithium	7439-93-2	137		0.24	2.2		1
01657	Magnesium	7439-95-4	7,140		2.80	11.0		1
06958	Manganese	7439-96-5	527		0.0861	0.552		1
10145	Phosphorus	7723-14-0	498		0.618	11.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
01662	Potassium	7440-09-7	6,180	19.9	55.2		1
01667	Sodium	7440-23-5	1,230	41.2	110		1
07968	Strontium	7440-24-6	144	0.0684	0.552		1
06969	Tin	7440-31-5	390	1.10	11.0		1
06970	Titanium	7440-32-6	1,900	0.420	1.10		1
10146	Zirconium	7440-67-7	111	0.927	5.52		1
	SW-846 6020		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	1.31	0.0675	0.225		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	10.2	0.0900	0.450		2
06126	Barium	7440-39-3	202	0.122	0.450		2
06127	Beryllium	7440-41-7	1.88	0.0180	0.113		2
06128	Cadmium	7440-43-9	1.88	0.0450	0.113		2
06131	Chromium	7440-47-3	41.3	0.135	0.450		2
06132	Cobalt	7440-48-4	64.0	0.0225	0.113		2
06133	Copper	7440-50-8	34.2	0.0743	0.450		2
06135	Lead	7439-92-1	24.1	0.0117	0.225		2
06138	Molybdenum	7439-98-7	15.2	0.0563	0.113		2
06139	Nickel	7440-02-0	46.7	0.113	0.450		2
06141	Selenium	7782-49-2	2.69	0.0450	0.450		2
06142	Silver	7440-22-4	14.3	0.0135	0.113		2
06145	Thallium	7440-28-0	0.974	0.0338	0.113		2
06148	Vanadium	7440-62-2	105	0.0248	0.113		2
06149	Zinc	7440-66-6	199	0.630	3.38		2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.231	0.0031	0.108		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	10.9	0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	12.0	0.92	1.7		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	681	10.3	34.4		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	45.7	1.1	5.7		5
	SW-846 9012B		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	5.9	0.20	0.55		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011 21:49	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 06:03	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011 16:30	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 04:33	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 09:41	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 09:19	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 09:10	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 08:55	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:43	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 21:53	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 18:37	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 19:48	Heather E Williams	10
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:17	Eric L Eby	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MS Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:37	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:07	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:08	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:08	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:07	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:07	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:07	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:48	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 22:35	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 22:35	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 20:44	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 17:19	Elyse P Brunstetter	5
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:43	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: **SL-022-SA5DN-SS-0.0-0.5MS Soil**
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296048
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MS

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg		ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	231		19.1	38.3		1
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Acenaphthene	83-32-9	1,900		19	190		1
04688	Acenaphthylene	208-96-8	1,900		19	190		1
04688	Aniline	62-53-3	1,400		190	570		1
04688	Anthracene	120-12-7	1,900		19	190		1
04688	Benzidine	92-87-5	2,800	J	1,300	3,800		1
04688	Benzo(a)anthracene	56-55-3	1,900		19	190		1
04688	Benzo(a)pyrene	50-32-8	1,900		19	190		1
04688	Benzo(b)fluoranthene	205-99-2	1,900		19	190		1
04688	Benzo(g,h,i)perylene	191-24-2	1,900		19	190		1
04688	Benzo(k)fluoranthene	207-08-9	1,800		19	190		1
04688	Benzoic acid	65-85-0	1,200		190	570		1
04688	Benzyl alcohol	100-51-6	2,200		190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	1,700		19	190		1
04688	Butylbenzylphthalate	85-68-7	2,100		19	190		1
04688	Di-n-butylphthalate	84-74-2	1,800		19	190		1
04688	Carbazole	86-74-8	1,900		19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	2,100		38	190		1
04688	4-Chloroaniline	106-47-8	1,600		76	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	1,700		19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	1,800		19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	1,800		19	190		1
04688	2-Chloronaphthalene	91-58-7	1,600		19	190		1
04688	2-Chlorophenol	95-57-8	2,000		19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	1,900		38	190		1
04688	Chrysene	218-01-9	1,900		19	190		1
04688	Dibenz(a,h)anthracene	53-70-3	1,900		19	190		1
04688	Dibenzofuran	132-64-9	1,900		19	190		1
04688	1,2-Dichlorobenzene	95-50-1	1,700		19	190		1
04688	1,3-Dichlorobenzene	541-73-1	1,600		19	190		1
04688	1,4-Dichlorobenzene	106-46-7	1,700		19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	1,500		110	380		1
04688	2,4-Dichlorophenol	120-83-2	2,000		19	190		1
04688	Diethylphthalate	84-66-2	1,900		19	190		1
04688	2,4-Dimethylphenol	105-67-9	1,800		38	190		1
04688	3,5-Dimethylphenol	108-68-9	2,000		38	190		1
04688	Dimethylphthalate	131-11-3	1,900		19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	1,300		190	570		1
04688	2,4-Dinitrophenol	51-28-5	2,000		380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	2,100		38	190		1
04688	2,6-Dinitrotoluene	606-20-2	2,000		19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	1,800		19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	2,000		19	380		1
04688	Fluoranthene	206-44-0	1,800		19	190		1
04688	Fluorene	86-73-7	2,000		19	190		1
04688	Hexachlorobenzene	118-74-1	1,800		19	190		1
04688	Hexachlorobutadiene	87-68-3	1,500		76	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg	ug/kg	ug/kg	ug/kg	
04688	Hexachlorocyclopentadiene	77-47-4	2,700	190	570		1
04688	Hexachloroethane	67-72-1	1,500	19	190		1
04688	Indeno(1,2,3-cd)pyrene	193-39-5	2,000	19	190		1
04688	Isophorone	78-59-1	1,800	19	190		1
04688	1-Methylnaphthalene	90-12-0	1,900	19	190		1
04688	2-Methylnaphthalene	91-57-6	1,800	19	190		1
04688	2-Methylphenol	95-48-7	2,000	38	190		1
04688	4-Methylphenol	106-44-5	2,100	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
04688	Naphthalene	91-20-3	1,700	19	190		1
04688	2-Nitroaniline	88-74-4	2,100	19	190		1
04688	3-Nitroaniline	99-09-2	2,100	38	190		1
04688	4-Nitroaniline	100-01-6	1,700	76	190		1
04688	Nitrobenzene	98-95-3	1,700	19	190		1
04688	2-Nitrophenol	88-75-5	1,900	19	190		1
04688	4-Nitrophenol	100-02-7	1,700	190	570		1
04688	N-Nitrosodimethylamine	62-75-9	1,700	38	190		1
04688	N-Nitroso-di-n-propylamine	621-64-7	2,000	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	1,800	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
04688	Di-n-octylphthalate	117-84-0	1,900	19	190		1
04688	Pentachlorophenol	87-86-5	1,600	190	570		1
04688	Phenanthrene	85-01-8	1,800	19	190		1
04688	Phenol	108-95-2	2,100	19	190		1
04688	Pyrene	129-00-0	2,000	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	1,700	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	2,000	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	2,000	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene						
GC/MS Semivolatiles SW-846 8270C SIM			ug/kg	ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	37	0.76	1.9		1
10138	Acenaphthylene	208-96-8	36	0.38	1.9		1
10138	Anthracene	120-12-7	39	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	38	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	48	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	54	0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	28	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	50	0.76	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Butylbenzylphthalate	85-68-7	42		6.9	21		1
10138	Di-n-butylphthalate	84-74-2	45		6.9	21		1
10138	Chrysene	218-01-9	39		0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	33		0.76	1.9		1
10138	Diethylphthalate	84-66-2	39		6.9	21		1
10138	Dimethylphthalate	131-11-3	38		6.9	21		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	39		6.9	21		1
10138	Fluoranthene	206-44-0	45		0.76	1.9		1
10138	Fluorene	86-73-7	39		0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	32		0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	36		0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	32		0.76	1.9		1
10138	Naphthalene	91-20-3	34		0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	37		0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	54		6.9	21		1
10138	Phenanthrene	85-01-8	40		0.76	1.9		1
10138	Pyrene	129-00-0	36		0.76	1.9		1
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	2,500		69	140		1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	2,500		46	140		1
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	92	U	92	280		1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	92	U	92	280		1
10132	1,3-Dinitrobenzene	99-65-0	2,600		46	140		1
10132	2,4-Dinitrotoluene	121-14-2	2,500		46	140		1
10132	2,6-Dinitrotoluene	606-20-2	2,500		46	140		1
10132	HMX	2691-41-0	2,200		110	340		1
10132	Nitrobenzene	98-95-3	2,600		46	140		1
10132	Nitroglycerin	55-63-0	55,000		920	2,800		1
10132	2-Nitrotoluene	88-72-2	2,400		92	140		1
10132	3-Nitrotoluene	99-08-1	2,600		110	140		1
10132	4-Nitrotoluene	99-99-0	2,400		92	140		1
10132	PETN	78-11-5	67,000		920	2,800		1
10132	RDX	121-82-4	2,100		57	140		1
10132	Tetryl	479-45-8	1,800		70	140		1
10132	1,3,5-Trinitrobenzene	99-35-4	2,400		46	140		1
10132	2,4,6-Trinitrotoluene	118-96-7	2,500		46	140		1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	8.9		1.4	4.1		1
10401	Dalapon	75-99-0	11		5.0	10		1
10401	2,4-DB	94-82-6	6.4		0.71	1.9		1
10401	Dicamba	1918-00-9	0.69	J	0.46	1.4		1
10401	Dinoseb	88-85-7	1.1	J	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	8.3		0.91	1.9		1
10401	MCPA	94-74-6	710		87	290		1
10401	MCPP (Mecoprop)	93-65-2	740		86	290		1
10401	2,4,5-T	93-76-5	0.56		0.093	0.20		1
10401	2,4,5-TP	93-72-1	0.64		0.086	0.20		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
	The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported. Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.							
HPLC Organics	**SW-846 8315A**		ug/kg		ug/kg	ug/kg	ug/kg	
04173	25a Formaldehyde 8315A	50-00-0	4,500		690	1,700		1
	The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.17	J	0.076	0.20		1
01363	Alpha BHC	319-84-6	0.23		0.039	0.20		1
01363	Beta BHC	319-85-7	0.20		0.069	0.20		1
01363	Gamma BHC - Lindane	58-89-9	0.24		0.039	0.20		1
01363	Chlordane	57-74-9	0.92	U	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.42		0.076	0.39		1
01363	p,p-DDE	72-55-9	0.37	J	0.076	0.39		1
01363	p,p-DDT	50-29-3	1.5		0.076	0.39		1
01363	Delta BHC	319-86-8	0.20		0.041	0.20		1
01363	Dieldrin	60-57-1	0.46		0.076	0.39		1
01363	Endosulfan I	959-98-8	0.16	J	0.051	0.20		1
01363	Endosulfan II	33213-65-9	0.39		0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.42		0.076	0.39		1
01363	Endrin	72-20-8	0.41		0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.25	J	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.32	J	0.076	0.39		1
01363	Heptachlor	76-44-8	0.29		0.069	0.20		1
01363	Heptachlor Epoxide	1024-57-3	0.20		0.039	0.20		1
01363	Methoxychlor	72-43-5	3.8		0.39	1.9		1
01363	Mirex	2385-85-5	0.076	U	0.076	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.5		1
	The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.							
	The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.							
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	4.0		1.1	3.8		1
10225	PCB-1016	12674-11-2	21		0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1242	53469-21-9	0.38	U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9		1
10225	PCB-1260	11096-82-5	21		0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	1,800		110	570		1
10501	Isopropanol	67-63-0	2,000		110	570		1
10501	Methanol	67-56-1	2,000		110	570		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	93		5.7	11		1
08283	Ethylene glycol	107-21-1	150		5.7	11		1
08283	Propylene glycol	57-55-6	160		5.7	11		1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.5	J	1.5	4.0		1
10318	o-Terphenyl	84-15-1	1.8	J	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.8	J	1.7	4.0		1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	4.6	U	4.6	14		10
10199	EFH (C15-C20)	n.a.	8.1	J	4.6	14		10
10199	EFH (C21-C30)	n.a.	110		4.6	14		10
10199	EFH (C30 - C40)	n.a.	400		4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6	U	4.6	14		10
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	35,600		5.66	22.5		1
07914	Boron	7440-42-8	225		1.00	5.63		1
01650	Calcium	7440-70-2	9,590		6.90	22.5		1
01654	Iron	7439-89-6	31,600		10.6	45.0		2
01656	Lithium	7439-93-2	143		0.25	2.3		1
01657	Magnesium	7439-95-4	7,350		2.86	11.3		1
06958	Manganese	7439-96-5	468		0.0878	0.563		1
10145	Phosphorus	7723-14-0	458		0.630	11.3		1
01662	Potassium	7440-09-7	6,140		20.3	56.3		1
01667	Sodium	7440-23-5	1,240		42.0	113		1
07968	Strontium	7440-24-6	148		0.0698	0.563		1
06969	Tin	7440-31-5	393		1.13	11.3		1
06970	Titanium	7440-32-6	1,980		0.428	1.13		1
10146	Zirconium	7440-67-7	113		0.945	5.63		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		mg/kg	mg/kg	mg/kg	mg/kg	
06124	Antimony	7440-36-0	1.51	0.0675	0.225		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.						
06125	Arsenic	7440-38-2	11.4	0.0900	0.450		2
06126	Barium	7440-39-3	159	0.122	0.450		2
06127	Beryllium	7440-41-7	2.10	0.0180	0.113		2
06128	Cadmium	7440-43-9	2.25	0.0450	0.113		2
06131	Chromium	7440-47-3	39.7	0.135	0.450		2
06132	Cobalt	7440-48-4	64.0	0.0225	0.113		2
06133	Copper	7440-50-8	39.0	0.0743	0.450		2
06135	Lead	7439-92-1	28.4	0.0117	0.225		2
06138	Molybdenum	7439-98-7	17.3	0.0563	0.113		2
06139	Nickel	7440-02-0	45.2	0.113	0.450		2
06141	Selenium	7782-49-2	2.97	0.0450	0.450		2
06142	Silver	7440-22-4	16.4	0.0135	0.113		2
06145	Thallium	7440-28-0	1.17	0.0338	0.113		2
06148	Vanadium	7440-62-2	117	0.0248	0.113		2
06149	Zinc	7440-66-6	178	0.630	3.38		2
	SW-846 7471A		mg/kg	mg/kg	mg/kg	mg/kg	
00159	Mercury	7439-97-6	0.216	0.0032	0.112		1
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/08/2011	22:07	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011	06:30	Mark A Clark	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/07/2011	17:02	Joseph M Gambler	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011	14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011	09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011	09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011	05:15	James H Place	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 09:51	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 09:46	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 09:24	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 09:14	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 22:58	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 22:06	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 19:22	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 20:13	Heather E Williams	10
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:20	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:40	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:10	David K Beck	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:10	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:10	David K Beck	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5MSD Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296049
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:10	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/07/2011 00:10	David K Beck	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:52	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296050
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13DUP

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	30,700		5.72	22.7		1
07914	Boron	7440-42-8	1.87	J	1.01	5.68		1
01650	Calcium	7440-70-2	8,480		6.97	22.7		1
01654	Iron	7439-89-6	31,900		10.7	45.5		2
01656	Lithium	7439-93-2	26.6		0.25	2.3		1
01657	Magnesium	7439-95-4	6,920		2.89	11.4		1
06958	Manganese	7439-96-5	435		0.0887	0.568		1
10145	Phosphorus	7723-14-0	344		0.637	11.4		1
01662	Potassium	7440-09-7	4,400		20.5	56.8		1
01667	Sodium	7440-23-5	140		42.4	114		1
07968	Strontium	7440-24-6	39.3		0.0705	0.568		1
06969	Tin	7440-31-5	3.16	J	1.14	11.4		1
06970	Titanium	7440-32-6	1,620		0.432	1.14		1
10146	Zirconium	7440-67-7	6.80		0.955	5.68		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.296		0.0675	0.225		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.08		0.0900	0.450		2
06126	Barium	7440-39-3	139		0.122	0.450		2
06127	Beryllium	7440-41-7	0.776		0.0180	0.113		2
06128	Cadmium	7440-43-9	0.373		0.0450	0.113		2
06131	Chromium	7440-47-3	28.4		0.135	0.450		2
06132	Cobalt	7440-48-4	9.51		0.0225	0.113		2
06133	Copper	7440-50-8	17.1		0.0743	0.450		2
06135	Lead	7439-92-1	17.2		0.0117	0.225		2
06138	Molybdenum	7439-98-7	1.14		0.0563	0.113		2
06139	Nickel	7440-02-0	20.6		0.113	0.450		2
06141	Selenium	7782-49-2	0.139	J	0.0450	0.450		2
06142	Silver	7440-22-4	0.136		0.0135	0.113		2
06145	Thallium	7440-28-0	0.337		0.0338	0.113		2
06148	Vanadium	7440-62-2	67.4		0.0248	0.113		2
06149	Zinc	7440-66-6	152		0.630	3.38		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0155	J	0.0031	0.108		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	4.6		0.92	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2	J	0.92	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.4		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.88	J	0.23	1.1		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-022-SA5DN-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296050
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9012B**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.20 U	0.20	0.57		1
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.00	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11626	28a Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1
	The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.						
11625	Moisture Content by 160.3	n.a.	12.9	0.50	0.50		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:13	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 19:33	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:04	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:06	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:06	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SL-022-SA5DN-SS-0.0-0.5DUP Soil
SSFL Area IV Collocated Soil Sampling
SL-022-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296050
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:25

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL022 SDG#: DE159-13DUP

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:04	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:04	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:04	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:47	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 22:21	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 22:21	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 20:22	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 17:53	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:42	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11626	28a Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1
11625	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402A	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			**ng/kg**		**ng/kg**	**ng/kg**	**ng/kg**	
11622	N-Nitrosodimethylamine	62-75-9	42.3		19.0	38.1		1
	The surrogate standard n-nitrosodimethylamine-d6 was outside of the advisory QC windows.							
GC/MS Semivolatiles SW-846 8270C			**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	Aniline	62-53-3	190	U	190	570		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	570		1
04688	Benzyl alcohol	100-51-6	190	U	190	570		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	75	U	75	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570		1
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	75	U	75	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	570		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	75	U	75	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	570		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Pentachlorophenol	87-86-5	190	U	190	570		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	0.76	U	0.76	1.9		1
10138	Acenaphthylene	208-96-8	0.38	U	0.38	1.9		1
10138	Anthracene	120-12-7	0.38	U	0.38	1.9		1
10138	Benzo(a)anthracene	56-55-3	1.2	J	0.76	1.9		1
10138	Benzo(a)pyrene	50-32-8	1.8	J	0.76	1.9		1
10138	Benzo(b)fluoranthene	205-99-2	4.8		0.76	1.9		1
10138	Benzo(g,h,i)perylene	191-24-2	1.0	J	0.76	1.9		1
10138	Benzo(k)fluoranthene	207-08-9	0.76	U	0.76	1.9		1
10138	Butylbenzylphthalate	85-68-7	6.8	U	6.8	20		1
10138	Di-n-butylphthalate	84-74-2	6.8	U	6.8	20		1
10138	Chrysene	218-01-9	1.5	J	0.38	1.9		1
10138	Dibenz(a,h)anthracene	53-70-3	0.76	U	0.76	1.9		1
10138	Diethylphthalate	84-66-2	6.8	U	6.8	20		1
10138	Dimethylphthalate	131-11-3	6.8	U	6.8	20		1
10138	Bis(2-Ethylhexyl)phthalate	117-81-7	6.8	U	6.8	20		1
10138	Fluoranthene	206-44-0	2.1		0.76	1.9		1
10138	Fluorene	86-73-7	0.76	U	0.76	1.9		1
10138	Indeno(1,2,3-cd)pyrene	193-39-5	0.88	J	0.76	1.9		1
10138	1-Methylnaphthalene	90-12-0	0.76	U	0.76	1.9		1
10138	2-Methylnaphthalene	91-57-6	0.76	U	0.76	1.9		1
10138	Naphthalene	91-20-3	0.76	U	0.76	1.9		1
10138	N-Nitrosodimethylamine	62-75-9	0.76	U	0.76	1.9		1
10138	Di-n-octylphthalate	117-84-0	6.8	U	6.8	20		1
10138	Phenanthrene	85-01-8	0.88	J	0.76	1.9		1
10138	Pyrene	129-00-0	1.7	J	0.76	1.9		1
Explosives	**SW-846 8330A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	67	U	67	130	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U	45	130	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90	U	90	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90	U	90	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	45	U	45	130	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	45	U	45	130	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	45	U	45	130	10000000	1
10132	HMX	2691-41-0	110	U	110	340	10000000	1
10132	Nitrobenzene	98-95-3	45	U	45	130	10000000	1
10132	Nitroglycerin	55-63-0	900	U	900	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	90	U	90	130	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	130	10000000	1
10132	4-Nitrotoluene	99-99-0	90	U	90	130	10000000	1
10132	PETN	78-11-5	900	U	900	2,700	10000000	1
10132	RDX	121-82-4	56	U	56	130	10000000	1
10132	Tetryl	479-45-8	68	U	68	130	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	45	U	45	130	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	45	U	45	130	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.9	J	1.4	4.1		1
10401	Dalapon	75-99-0	5.0	U	5.0	10		1
10401	2,4-DB	94-82-6	0.70	U	0.70	1.9		1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.4		1
10401	Dinoseb	88-85-7	0.91	U	0.91	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.91	U	0.91	1.9		1
10401	MCPA	94-74-6	270	J	86	280		1
10401	MCPP (Mecoprop)	93-65-2	85	U	85	280		1
10401	2,4,5-T	93-76-5	0.093	U	0.093	0.19		1
10401	2,4,5-TP	93-72-1	0.085	U	0.085	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	25a Formaldehyde 8315A	50-00-0	680	U	680	1,700		1
	The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.075	U	0.075	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.068	U	0.068	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	4.4		0.91	3.9		1
01363	p,p-DDD	72-54-8	0.075	U	0.075	0.39		1
01363	p,p-DDE	72-55-9	0.19	J	0.075	0.39		1
01363	p,p-DDT	50-29-3	0.48		0.075	0.39		1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.21	J	0.075	0.39		1
01363	Endosulfan I	959-98-8	0.050	U	0.050	0.19		1
01363	Endosulfan II	33213-65-9	0.075	U	0.075	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.075	U	0.075	0.39		1
01363	Endrin	72-20-8	0.075	U	0.075	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.075	U	0.075	0.39		1
01363	Endrin Ketone	53494-70-5	0.075	U	0.075	0.39		1
01363	Heptachlor	76-44-8	0.068	U	0.068	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.086	J	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.075	U	0.075	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.5		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. The original data is reported.

Heptachlor epoxide, DDE, and dieldrin are not detected in the reextract. Endosulfan II is detected at .08 ug/kg and mirex is detected at .19 ug/kg in the reextract.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1
10225	Aroclor 5460	11126-42-4	1.6	J	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1242	53469-21-9	0.38	U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9		1
10225	PCB-1260	11096-82-5	1.6	J	0.44	1.9		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
GC Miscellaneous	**SW-846 8015B**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10501	Ethanol	64-17-5	110	U	110	570		1
10501	Isopropanol	67-63-0	110	U	110	570		1
10501	Methanol	67-56-1	110	U	110	570		1
GC Miscellaneous	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
08283	Diethylene glycol	111-46-6	5.7	U	5.7	11		1
08283	Ethylene glycol	107-21-1	5.7	U	5.7	11		1
08283	Propylene glycol	57-55-6	5.7	U	5.7	11		1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
10199	EFH (C12-C14)	n.a.	0.46	U	0.46	1.4		1
10199	EFH (C15-C20)	n.a.	5.1		0.46	1.4		1
10199	EFH (C21-C30)	n.a.	11		0.46	1.4		1
10199	EFH (C30 - C40)	n.a.	40		0.46	1.4		1
10199	EFH (C8-C11)	n.a.	0.46	U	0.46	1.4		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	32,300		5.52	22.0		1
07914	Boron	7440-42-8	2.70	J	0.977	5.49		1
01650	Calcium	7440-70-2	49,000		6.73	22.0		1
01654	Iron	7439-89-6	32,100		10.3	43.9		2
01656	Lithium	7439-93-2	28.7		0.24	2.2		1
01657	Magnesium	7439-95-4	7,310		2.79	11.0		1
06958	Manganese	7439-96-5	448		0.0856	0.549		1
10145	Phosphorus	7723-14-0	316		0.615	11.0		1
01662	Potassium	7440-09-7	4,250		19.8	54.9		1
01667	Sodium	7440-23-5	135		40.9	110		1
07968	Strontium	7440-24-6	51.8		0.0681	0.549		1
06969	Tin	7440-31-5	2.79	J	1.10	11.0		1
06970	Titanium	7440-32-6	1,570		0.417	1.10		1
10146	Zirconium	7440-67-7	7.12		0.922	5.49		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.353		0.0672	0.224		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	7.86		0.0895	0.448		2
06126	Barium	7440-39-3	183		0.121	0.448		2
06127	Beryllium	7440-41-7	1.01		0.0179	0.112		2
06128	Cadmium	7440-43-9	0.329		0.0448	0.112		2
06131	Chromium	7440-47-3	33.1		0.134	0.448		2
06132	Cobalt	7440-48-4	10.1		0.0224	0.112		2
06133	Copper	7440-50-8	20.1		0.0739	0.448		2
06135	Lead	7439-92-1	12.8		0.0116	0.224		2
06138	Molybdenum	7439-98-7	0.562		0.0560	0.112		2
06139	Nickel	7440-02-0	26.3		0.112	0.448		2
06141	Selenium	7782-49-2	0.0791	J	0.0448	0.448		2
06142	Silver	7440-22-4	0.0701	J	0.0134	0.112		2
06145	Thallium	7440-28-0	0.463		0.0336	0.112		2
06148	Vanadium	7440-62-2	87.2		0.0246	0.112		2
06149	Zinc	7440-66-6	86.5		0.627	3.36		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0032	U	0.0032	0.112		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.4		0.91	1.1		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.1	J	0.91	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.3	U	10.3	34.2		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	1.1	J	0.23	1.1		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.57		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	7.99		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	12.4		0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.							

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 17:30	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 17:24	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 16:46	Gregory J Drahovsky	1
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 05:58	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 10:10	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 12:32	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 11:13	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 09:32	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 23:43	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 22:44	Dustin A Underkoffler	1
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 14:06	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 17:43	Heather E Williams	1
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:48	Eric L Eby	2

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:12	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 07:38	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:33	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:33	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:38	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:38	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 07:38	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:53	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 23:32	Ashley M Adams	1
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	05/31/2011 23:32	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 21:50	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 18:16	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201B	05/31/2011 19:45	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201B	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-023-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-023-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296051
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 10:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL023 SDG#: DE159-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402B	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	580		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,900		1
04688	Benzoic acid	65-85-0	190	U	190	580		1
04688	Benzyl alcohol	100-51-6	190	U	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	39	U	39	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	39	U	39	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	390		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	39	U	39	190		1
04688	3,5-Dimethylphenol	108-68-9	39	U	39	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580		1
04688	2,4-Dinitrophenol	51-28-5	390	U	390	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	39	U	39	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	390		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	39	U	39	190		1
04688	4-Methylphenol	106-44-5	39	U	39	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	39	U	39	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	580		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	39	U	39	190		1
04688	2,4,6-Trichlorophenol	88-06-2	39	U	39	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.8	U	3.8	9.6		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.6		5
10138	Anthracene	120-12-7	1.9	U	1.9	9.6		5
10138	Benzo(a)anthracene	56-55-3	3.8	U	3.8	9.6		5
10138	Benzo(a)pyrene	50-32-8	3.8	U	3.8	9.6		5
10138	Benzo(b)fluoranthene	205-99-2	13		3.8	9.6		5
10138	Benzo(g,h,i)perylene	191-24-2	3.8	U	3.8	9.6		5
10138	Benzo(k)fluoranthene	207-08-9	3.8	U	3.8	9.6		5
10138	Chrysene	218-01-9	6.8	J	1.9	9.6		5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U	3.8	9.6		5
10138	Fluoranthene	206-44-0	10		3.8	9.6		5
10138	Fluorene	86-73-7	3.8	U	3.8	9.6		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U	3.8	9.6		5
10138	1-Methylnaphthalene	90-12-0	3.8	U	3.8	9.6		5
10138	2-Methylnaphthalene	91-57-6	3.8	U	3.8	9.6		5
10138	Naphthalene	91-20-3	3.8	U	3.8	9.6		5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U	3.8	9.6		5
10138	Phenanthrene	85-01-8	4.8	J	3.8	9.6		5
10138	Pyrene	129-00-0	6.1	J	3.8	9.6		5
	Reporting limits were raised due to interference from the sample matrix.							
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.7	J	1.4	4.2		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	0.72	U	0.72	2.0		1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.92	U	0.92	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U	0.92	2.0		1
10401	MCPA	94-74-6	230	J	88	290		1
10401	MCPP (Mecoprop)	93-65-2	87	U	87	290		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4,5-T	93-76-5	0.095	U	0.095	0.20		1
10401	2,4,5-TP	93-72-1	0.22		0.087	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069	U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	1.2	J	0.92	3.9		1
01363	p,p-DDD	72-54-8	0.076	U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.14	J	0.076	0.39		1
01363	p,p-DDT	50-29-3	0.28	J	0.076	0.39		1
01363	Delta BHC	319-86-8	0.042	U	0.042	0.19		1
01363	Dieldrin	60-57-1	0.076	U	0.076	0.39		1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076	U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076	U	0.076	0.39		1
01363	Endrin	72-20-8	0.076	U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.17	J	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069	U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039	U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.095	U	0.095	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. the original data is reported.

Reporting limits were raised due to interference from the sample matrix.

The surrogate recoveries are low for the reextract. DDE, DDT, endrin aldehyde and chlordane are not detected in the reextract.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.2	U	1.2	3.8		1
10225	Aroclor 5442	12642-23-8	1.2	U	1.2	3.8		1
10225	Aroclor 5460	11126-42-4	3.4	J	1.2	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	2.0		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	2.0		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1232	11141-16-5	0.38	U	0.38	2.0		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	2.0		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	2.0		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	2.0		1
10225	PCB-1260	11096-82-5	1.4	J	0.45	2.0		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	2.0		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	2.0		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	34,200		5.65	22.4		1
07914	Boron	7440-42-8	2.42	J	0.999	5.61		1
01650	Calcium	7440-70-2	7,210		6.88	22.4		1
01654	Iron	7439-89-6	33,900		10.6	44.9		2
01656	Lithium	7439-93-2	28.1		0.25	2.2		1
01657	Magnesium	7439-95-4	7,510		2.85	11.2		1
06958	Manganese	7439-96-5	466		0.0875	0.561		1
10145	Phosphorus	7723-14-0	335		0.629	11.2		1
01662	Potassium	7440-09-7	5,180		20.2	56.1		1
01667	Sodium	7440-23-5	138		41.9	112		1
07968	Strontium	7440-24-6	41.5		0.0696	0.561		1
06969	Tin	7440-31-5	3.06	J	1.12	11.2		1
06970	Titanium	7440-32-6	1,660		0.427	1.12		1
10146	Zirconium	7440-67-7	7.02		0.943	5.61		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.386		0.0673	0.224		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.16		0.0898	0.449		2
06126	Barium	7440-39-3	133		0.121	0.449		2
06127	Beryllium	7440-41-7	1.09		0.0180	0.112		2
06128	Cadmium	7440-43-9	0.491		0.0449	0.112		2
06131	Chromium	7440-47-3	30.3		0.135	0.449		2
06132	Cobalt	7440-48-4	9.27		0.0224	0.112		2
06133	Copper	7440-50-8	23.4		0.0741	0.449		2
06135	Lead	7439-92-1	16.6		0.0117	0.224		2
06138	Molybdenum	7439-98-7	0.649		0.0561	0.112		2
06139	Nickel	7440-02-0	29.8		0.112	0.449		2
06141	Selenium	7782-49-2	0.216	J	0.0449	0.449		2
06142	Silver	7440-22-4	0.0774	J	0.0135	0.112		2
06145	Thallium	7440-28-0	0.506		0.0337	0.112		2
06148	Vanadium	7440-62-2	97.1		0.0247	0.112		2
06149	Zinc	7440-66-6	140		0.629	3.37		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0038	J	0.0031	0.110		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.9		0.92	1.2		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4	U	10.4	34.7		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.53	J	0.23	1.2		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	7.74		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	13.5		0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 17:51	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 17:59	Gregory J Drahovsky	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 13:55	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 11:40	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 09:51	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 09:05	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:47	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/07/2011 00:55	David K Beck	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:55	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:55	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:10	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:10	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:10	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:02	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	05/31/2011 23:46	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 22:12	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 18:22	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-052-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-052-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296052
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL052 SDG#: DE159-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	560		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,700		1
04688	Benzoic acid	65-85-0	190	U	190	560		1
04688	Benzyl alcohol	100-51-6	190	U	190	560		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	37	U	37	190		1
04688	4-Chloroaniline	106-47-8	74	U	74	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	37	U	37	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	37	U	37	190		1
04688	3,5-Dimethylphenol	108-68-9	37	U	37	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	560		1
04688	2,4-Dinitrophenol	51-28-5	370	U	370	1,100		1
04688	2,4-Dinitrotoluene	121-14-2	37	U	37	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	370		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	74	U	74	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	560		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	37	U	37	190		1
04688	4-Methylphenol	106-44-5	37	U	37	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	37	U	37	190		1
04688	4-Nitroaniline	100-01-6	74	U	74	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	560		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	560		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	37	U	37	190		1
04688	2,4,6-Trichlorophenol	88-06-2	37	U	37	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	3.7	U	3.7	9.2		5
10138	Acenaphthylene	208-96-8	1.8	U	1.8	9.2		5
10138	Anthracene	120-12-7	2.2	J	1.8	9.2		5
10138	Benzo(a)anthracene	56-55-3	5.9	J	3.7	9.2		5
10138	Benzo(a)pyrene	50-32-8	9.2	J	3.7	9.2		5
10138	Benzo(b)fluoranthene	205-99-2	34		3.7	9.2		5
10138	Benzo(g,h,i)perylene	191-24-2	6.3	J	3.7	9.2		5
10138	Benzo(k)fluoranthene	207-08-9	3.7	U	3.7	9.2		5
10138	Chrysene	218-01-9	15		1.8	9.2		5
10138	Dibenz(a,h)anthracene	53-70-3	3.7	U	3.7	9.2		5
10138	Fluoranthene	206-44-0	30		3.7	9.2		5
10138	Fluorene	86-73-7	3.7	U	3.7	9.2		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	4.5	J	3.7	9.2		5
10138	1-Methylnaphthalene	90-12-0	3.7	U	3.7	9.2		5
10138	2-Methylnaphthalene	91-57-6	3.7	U	3.7	9.2		5
10138	Naphthalene	91-20-3	3.7	U	3.7	9.2		5
10138	N-Nitrosodimethylamine	62-75-9	3.7	U	3.7	9.2		5
10138	Phenanthrene	85-01-8	18		3.7	9.2		5
10138	Pyrene	129-00-0	19		3.7	9.2		5
	Reporting limits were raised due to interference from the sample matrix.							
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	1.3	U	1.3	4.0		1
10401	Dalapon	75-99-0	4.9	U	4.9	10		1
10401	2,4-DB	94-82-6	0.70	U	0.70	1.9		1
10401	Dicamba	1918-00-9	0.45	U	0.45	1.3		1
10401	Dinoseb	88-85-7	0.90	U	0.90	2.7		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.90	U	0.90	1.9		1
10401	MCPA	94-74-6	85	U	85	280		1
10401	MCPP (Mecoprop)	93-65-2	84	U	84	280		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4,5-T	93-76-5	0.092	U	0.092	0.19		1
10401	2,4,5-TP	93-72-1	0.12	J	0.084	0.19		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.

Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.074	U	0.074	0.19		1
01363	Alpha BHC	319-84-6	0.038	U	0.038	0.19		1
01363	Beta BHC	319-85-7	0.067	U	0.067	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.038	U	0.038	0.19		1
01363	Chlordane	57-74-9	1.5	U	1.5	3.8		1
01363	p,p-DDD	72-54-8	0.074	U	0.074	0.38		1
01363	p,p-DDE	72-55-9	0.10	U	0.10	0.38		1
01363	p,p-DDT	50-29-3	0.95		0.074	0.38		1
01363	Delta BHC	319-86-8	0.040	U	0.040	0.19		1
01363	Dieldrin	60-57-1	0.15	U	0.15	0.38		1
01363	Endosulfan I	959-98-8	0.049	U	0.049	0.19		1
01363	Endosulfan II	33213-65-9	0.089	U	0.089	0.38		1
01363	Endosulfan Sulfate	1031-07-8	0.074	U	0.074	0.38		1
01363	Endrin	72-20-8	0.074	U	0.074	0.38		1
01363	Endrin Aldehyde	7421-93-4	0.074	U	0.074	0.38		1
01363	Endrin Ketone	53494-70-5	0.074	U	0.074	0.38		1
01363	Heptachlor	76-44-8	0.067	U	0.067	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.038	U	0.038	0.19		1
01363	Methoxychlor	72-43-5	0.38	U	0.38	1.9		1
01363	Mirex	2385-85-5	0.12	U	0.12	0.38		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.4		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. Similar results are observed for both. The original data is reported.

The surrogate recovery for the reextract is low.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.7		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.7		1
10225	Aroclor 5460	11126-42-4	1.1	U	1.1	3.7		1
10225	PCB-1016	12674-11-2	0.37	U	0.37	1.9		1
10225	PCB-1221	11104-28-2	0.37	U	0.37	1.9		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	PCB-1232	11141-16-5	0.37	U	0.37	1.9		1
10225	PCB-1242	53469-21-9	0.37	U	0.37	1.9		1
10225	PCB-1248	12672-29-6	0.37	U	0.37	1.9		1
10225	PCB-1254	11097-69-1	0.37	U	0.37	1.9		1
10225	PCB-1260	11096-82-5	0.44	U	0.44	1.9		1
10225	PCB-1262	37324-23-5	0.37	U	0.37	1.9		1
10225	PCB-1268	11100-14-4	0.37	U	0.37	1.9		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	24,200		5.60	22.2		1
07914	Boron	7440-42-8	0.990	U	0.990	5.56		1
01650	Calcium	7440-70-2	9,360		6.82	22.2		1
01654	Iron	7439-89-6	29,800		5.24	22.2		1
01656	Lithium	7439-93-2	19.4		0.24	2.2		1
01657	Magnesium	7439-95-4	5,310		2.83	11.1		1
06958	Manganese	7439-96-5	538		0.0868	0.556		1
10145	Phosphorus	7723-14-0	445		0.623	11.1		1
01662	Potassium	7440-09-7	4,050		20.0	55.6		1
01667	Sodium	7440-23-5	129		41.5	111		1
07968	Strontium	7440-24-6	37.8		0.0690	0.556		1
06969	Tin	7440-31-5	2.88	J	1.11	11.1		1
06970	Titanium	7440-32-6	1,450		0.423	1.11		1
10146	Zirconium	7440-67-7	5.62		0.934	5.56		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.351		0.0655	0.218		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	6.65		0.0873	0.436		2
06126	Barium	7440-39-3	187		0.118	0.436		2
06127	Beryllium	7440-41-7	0.913		0.0175	0.109		2
06128	Cadmium	7440-43-9	0.461		0.0436	0.109		2
06131	Chromium	7440-47-3	26.4		0.131	0.436		2
06132	Cobalt	7440-48-4	10.6		0.0218	0.109		2
06133	Copper	7440-50-8	20.4		0.0720	0.436		2
06135	Lead	7439-92-1	16.9		0.0113	0.218		2
06138	Molybdenum	7439-98-7	0.907		0.0545	0.109		2
06139	Nickel	7440-02-0	24.7		0.109	0.436		2
06141	Selenium	7782-49-2	0.155	J	0.0436	0.436		2
06142	Silver	7440-22-4	0.0515	J	0.0131	0.109		2
06145	Thallium	7440-28-0	0.425		0.0327	0.109		2
06148	Vanadium	7440-62-2	82.1		0.0240	0.109		2
06149	Zinc	7440-66-6	108		0.611	3.27		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0043	J	0.0032	0.112		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.7		0.90	1.1		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.1	U	10.1	33.7		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.43	J	0.22	1.1		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	7.78		0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**		**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	11.0		0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 18:17	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/08/2011 18:30	Gregory J Drahovsky	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 14:22	Michele D Hamilton	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 12:07	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 10:09	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:51	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:13	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:58	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:58	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:13	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:13	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:13	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:05	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	06/01/2011 00:00	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 22:34	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 18:33	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SL-053-SA5DN-SS-0.0-0.5 Soil
SSFL Area IV Collocated Soil Sampling
SL-053-SA5DN-SS-0.0-0.5

LLI Sample # SW 6296053
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 08:40

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SL053 SDG#: DE159-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11153162401B	06/02/2011 17:29	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			ng/kg		ng/kg	ng/kg	ng/kg	
11622	N-Nitrosodimethylamine	62-75-9	19.2	U	19.2	38.4		1
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	190	U	190	580		1
04688	Benzidine	92-87-5	1,300	U	1,300	3,800		1
04688	Benzoic acid	65-85-0	190	U	190	580		1
04688	Benzyl alcohol	100-51-6	190	U	190	580		1
04688	4-Bromophenyl-phenylether	101-55-3	19	U	19	190		1
04688	Butylbenzylphthalate	85-68-7	19	U	19	190		1
04688	Di-n-butylphthalate	84-74-2	19	U	19	190		1
04688	Carbazole	86-74-8	19	U	19	190		1
04688	4-Chloro-3-methylphenol	59-50-7	38	U	38	190		1
04688	4-Chloroaniline	106-47-8	77	U	77	190		1
04688	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	190		1
04688	bis(2-Chloroethyl)ether	111-44-4	19	U	19	190		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	19	U	19	190		1
04688	2-Chloronaphthalene	91-58-7	19	U	19	190		1
04688	2-Chlorophenol	95-57-8	19	U	19	190		1
04688	4-Chlorophenyl-phenylether	7005-72-3	38	U	38	190		1
04688	Dibenzofuran	132-64-9	19	U	19	190		1
04688	1,2-Dichlorobenzene	95-50-1	19	U	19	190		1
04688	1,3-Dichlorobenzene	541-73-1	19	U	19	190		1
04688	1,4-Dichlorobenzene	106-46-7	19	U	19	190		1
04688	3,3'-Dichlorobenzidine	91-94-1	120	U	120	380		1
04688	2,4-Dichlorophenol	120-83-2	19	U	19	190		1
04688	Diethylphthalate	84-66-2	19	U	19	190		1
04688	2,4-Dimethylphenol	105-67-9	38	U	38	190		1
04688	3,5-Dimethylphenol	108-68-9	38	U	38	190		1
04688	Dimethylphthalate	131-11-3	19	U	19	190		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	580		1
04688	2,4-Dinitrophenol	51-28-5	380	U	380	1,200		1
04688	2,4-Dinitrotoluene	121-14-2	38	U	38	190		1
04688	2,6-Dinitrotoluene	606-20-2	19	U	19	190		1
04688	1,2-Diphenylhydrazine	122-66-7	19	U	19	190		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	19	U	19	380		1
04688	Hexachlorobenzene	118-74-1	19	U	19	190		1
04688	Hexachlorobutadiene	87-68-3	77	U	77	190		1
04688	Hexachlorocyclopentadiene	77-47-4	190	U	190	580		1
04688	Hexachloroethane	67-72-1	19	U	19	190		1
04688	Isophorone	78-59-1	19	U	19	190		1
04688	2-Methylphenol	95-48-7	38	U	38	190		1
04688	4-Methylphenol	106-44-5	38	U	38	190		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	19	U	19	190		1
04688	3-Nitroaniline	99-09-2	38	U	38	190		1
04688	4-Nitroaniline	100-01-6	77	U	77	190		1
04688	Nitrobenzene	98-95-3	19	U	19	190		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		ug/kg		ug/kg	ug/kg	ug/kg	
04688	2-Nitrophenol	88-75-5	19	U	19	190		1
04688	4-Nitrophenol	100-02-7	190	U	190	580		1
04688	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	190		1
04688	N-Nitrosodiphenylamine	86-30-6	19	U	19	190		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	19	U	19	190		1
04688	Pentachlorophenol	87-86-5	190	U	190	580		1
04688	Phenol	108-95-2	19	U	19	190		1
04688	1,2,4-Trichlorobenzene	120-82-1	19	U	19	190		1
04688	2,4,5-Trichlorophenol	95-95-4	38	U	38	190		1
04688	2,4,6-Trichlorophenol	88-06-2	38	U	38	190		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/kg		ug/kg	ug/kg	ug/kg	
10138	Acenaphthene	83-32-9	3.8	U	3.8	9.5		5
10138	Acenaphthylene	208-96-8	1.9	U	1.9	9.5		5
10138	Anthracene	120-12-7	1.9	U	1.9	9.5		5
10138	Benzo(a)anthracene	56-55-3	3.8	U	3.8	9.5		5
10138	Benzo(a)pyrene	50-32-8	5.7	J	3.8	9.5		5
10138	Benzo(b)fluoranthene	205-99-2	5.1	J	3.8	9.5		5
10138	Benzo(g,h,i)perylene	191-24-2	4.1	J	3.8	9.5		5
10138	Benzo(k)fluoranthene	207-08-9	11		3.8	9.5		5
10138	Chrysene	218-01-9	6.9	J	1.9	9.5		5
10138	Dibenz(a,h)anthracene	53-70-3	3.8	U	3.8	9.5		5
10138	Fluoranthene	206-44-0	16		3.8	9.5		5
10138	Fluorene	86-73-7	3.8	U	3.8	9.5		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	3.8	U	3.8	9.5		5
10138	1-Methylnaphthalene	90-12-0	3.8	U	3.8	9.5		5
10138	2-Methylnaphthalene	91-57-6	3.8	U	3.8	9.5		5
10138	Naphthalene	91-20-3	3.8	U	3.8	9.5		5
10138	N-Nitrosodimethylamine	62-75-9	3.8	U	3.8	9.5		5
10138	Phenanthrene	85-01-8	11		3.8	9.5		5
10138	Pyrene	129-00-0	11		3.8	9.5		5
	Reporting limits were raised due to interference from the sample matrix.							
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	4-Amino-2,6-Dinitrotoluene	19406-51-0	68	U	68	140	10000000	1
10132	2-Amino-4,6-Dinitrotoluene	35572-78-2	45	U	45	140	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/kg		ug/kg	ug/kg	ug/kg	
10132	2,6-Diamino-4-nitrotoluene	59229-75-3	90	U	90	270	10000000	1
10132	2,4-Diamino-6-nitrotoluene	6629-29-4	90	U	90	270	10000000	1
10132	1,3-Dinitrobenzene	99-65-0	45	U	45	140	10000000	1
10132	2,4-Dinitrotoluene	121-14-2	45	U	45	140	10000000	1
10132	2,6-Dinitrotoluene	606-20-2	45	U	45	140	10000000	1
10132	HMX	2691-41-0	110	U	110	340	10000000	1
10132	Nitrobenzene	98-95-3	45	U	45	140	10000000	1
10132	Nitroglycerin	55-63-0	900	U	900	2,700	10000000	1
10132	2-Nitrotoluene	88-72-2	90	U	90	140	10000000	1
10132	3-Nitrotoluene	99-08-1	110	U	110	140	10000000	1
10132	4-Nitrotoluene	99-99-0	90	U	90	140	10000000	1
10132	PETN	78-11-5	900	U	900	2,700	10000000	1
10132	RDX	121-82-4	56	U	56	140	10000000	1
10132	Tetryl	479-45-8	69	U	69	140	10000000	1
10132	1,3,5-Trinitrobenzene	99-35-4	45	U	45	140	10000000	1
10132	2,4,6-Trinitrotoluene	118-96-7	45	U	45	140	10000000	1
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4-D	94-75-7	1.4	U	1.4	4.1		1
10401	Dalapon	75-99-0	5.1	U	5.1	10		1
10401	2,4-DB	94-82-6	0.71	U	0.71	2.0		1
10401	Dicamba	1918-00-9	0.46	U	0.46	1.4		1
10401	Dinoseb	88-85-7	0.92	U	0.92	2.8		1
10401	2,4-DP (Dichlorprop)	120-36-5	0.92	U	0.92	2.0		1
10401	MCPA	94-74-6	99	U	99	290		1
10401	MCPP (Mecoprop)	93-65-2	86	U	86	290		1
10401	2,4,5-T	93-76-5	0.094	U	0.094	0.20		1
10401	2,4,5-TP	93-72-1	0.16	J	0.086	0.20		1

The recovery for dinoseb in the LCS is outside the project QC window. Since the recovery is within our laboratory statistical window, the data is reported.
Due to interfering peaks on the chromatogram, the values reported represent the lowest reporting limits attainable.
Despite florisil cleanup, our usual reporting limits were not attained.

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
HPLC Organics	**SW-846 8315A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04173	25a Formaldehyde 8315A	50-00-0	690	U	690	1,700		1
	The LCS recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Perchlorate	**SW-846 6850 1/2007**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
06557	6a Perchlorate EPA 6850	14797-73-0	2.4	U	2.4	5.8		1
Pesticides/PCBs	**SW-846 8081A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
01363	Aldrin	309-00-2	0.076	U	0.076	0.19		1
01363	Alpha BHC	319-84-6	0.039	U	0.039	0.19		1
01363	Beta BHC	319-85-7	0.069	U	0.069	0.19		1
01363	Gamma BHC - Lindane	58-89-9	0.039	U	0.039	0.19		1
01363	Chlordane	57-74-9	2.6	U	2.6	3.9		1
01363	p,p-DDD	72-54-8	0.076	U	0.076	0.39		1
01363	p,p-DDE	72-55-9	0.13	U	0.13	0.39		1
01363	p,p-DDT	50-29-3	0.65		0.076	0.39		1
01363	Delta BHC	319-86-8	0.041	U	0.041	0.19		1
01363	Dieldrin	60-57-1	0.097	U	0.097	0.39		1
01363	Endosulfan I	959-98-8	0.051	U	0.051	0.19		1
01363	Endosulfan II	33213-65-9	0.076	U	0.076	0.39		1
01363	Endosulfan Sulfate	1031-07-8	0.076	U	0.076	0.39		1
01363	Endrin	72-20-8	0.076	U	0.076	0.39		1
01363	Endrin Aldehyde	7421-93-4	0.076	U	0.076	0.39		1
01363	Endrin Ketone	53494-70-5	0.076	U	0.076	0.39		1
01363	Heptachlor	76-44-8	0.069	U	0.069	0.19		1
01363	Heptachlor Epoxide	1024-57-3	0.039	U	0.039	0.19		1
01363	Methoxychlor	72-43-5	0.39	U	0.39	1.9		1
01363	Mirex	2385-85-5	0.13	U	0.13	0.39		1
01363	Toxaphene	8001-35-2	2.5	U	2.5	7.6		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. Similar results are observed for both. The original data is reported.

The surrogate recovery for the reextractr is low.

Reporting limits were raised due to interference from the sample matrix.

Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5432	63496-31-1	1.1	U	1.1	3.8		1
10225	Aroclor 5442	12642-23-8	1.1	U	1.1	3.8		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5460	11126-42-4	1.9	J	1.1	3.8		1
10225	PCB-1016	12674-11-2	0.38	U	0.38	1.9		1
10225	PCB-1221	11104-28-2	0.38	U	0.38	1.9		1
10225	PCB-1232	11141-16-5	0.38	U	0.38	1.9		1
10225	PCB-1242	53469-21-9	0.38	U	0.38	1.9		1
10225	PCB-1248	12672-29-6	0.38	U	0.38	1.9		1
10225	PCB-1254	11097-69-1	0.38	U	0.38	1.9		1
10225	PCB-1260	11096-82-5	2.3		0.45	1.9		1
10225	PCB-1262	37324-23-5	0.38	U	0.38	1.9		1
10225	PCB-1268	11100-14-4	0.38	U	0.38	1.9		1
GC Miscellaneous	**SW-846 8015B**		ug/kg		ug/kg	ug/kg	ug/kg	
10501	Ethanol	64-17-5	120	U	120	580		1
10501	Isopropanol	67-63-0	120	U	120	580		1
10501	Methanol	67-56-1	120	U	120	580		1
GC Miscellaneous	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	mg/kg	
08283	Diethylene glycol	111-46-6	5.8	U	5.8	12		1
08283	Ethylene glycol	107-21-1	5.8	U	5.8	12		1
08283	Propylene glycol	57-55-6	5.8	U	5.8	12		1
GC Petroleum Hydrocarbons	**SW-846 8015B**		mg/kg		mg/kg	mg/kg	mg/kg	
10318	m-Terphenyl	92-06-8	1.7	U	1.7	4.0		1
10318	o-Terphenyl	84-15-1	1.7	U	1.7	4.0		1
10318	p-Terphenyl	92-94-4	1.7	U	1.7	4.0		1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		mg/kg		mg/kg	mg/kg	mg/kg	
10199	EFH (C12-C14)	n.a.	5.6	J	4.6	14		10
10199	EFH (C15-C20)	n.a.	30		4.6	14		10
10199	EFH (C21-C30)	n.a.	81		4.6	14		10
10199	EFH (C30 - C40)	n.a.	250		4.6	14		10
10199	EFH (C8-C11)	n.a.	4.6	U	4.6	14		10
Metals	**SW-846 6010B**		mg/kg		mg/kg	mg/kg	mg/kg	
01643	Aluminum	7429-90-5	29,900		5.79	23.0		1
07914	Boron	7440-42-8	2.14	J	1.02	5.75		1
01650	Calcium	7440-70-2	9,310		7.05	23.0		1
01654	Iron	7439-89-6	31,500		10.8	46.0		2
01656	Lithium	7439-93-2	26.0		0.25	2.3		1
01657	Magnesium	7439-95-4	6,720		2.92	11.5		1
06958	Manganese	7439-96-5	427		0.0898	0.575		1
10145	Phosphorus	7723-14-0	333		0.644	11.5		1
01662	Potassium	7440-09-7	4,320		20.7	57.5		1
01667	Sodium	7440-23-5	139		42.9	115		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07968	Strontium	7440-24-6	38.0		0.0713	0.575		1
06969	Tin	7440-31-5	3.12	J	1.15	11.5		1
06970	Titanium	7440-32-6	1,590		0.437	1.15		1
10146	Zirconium	7440-67-7	6.81		0.967	5.75		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.457		0.0684	0.228		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	8.68		0.0911	0.456		2
06126	Barium	7440-39-3	145		0.308	1.14		5
06127	Beryllium	7440-41-7	1.07		0.0182	0.114		2
06128	Cadmium	7440-43-9	0.573		0.0456	0.114		2
06131	Chromium	7440-47-3	29.7		0.137	0.456		2
06132	Cobalt	7440-48-4	9.39		0.0228	0.114		2
06133	Copper	7440-50-8	25.7		0.0752	0.456		2
06135	Lead	7439-92-1	22.5		0.0118	0.228		2
06138	Molybdenum	7439-98-7	1.32		0.0570	0.114		2
06139	Nickel	7440-02-0	30.8		0.114	0.456		2
06141	Selenium	7782-49-2	0.210	J	0.0456	0.456		2
06142	Silver	7440-22-4	0.0939	J	0.0137	0.114		2
06145	Thallium	7440-28-0	0.494		0.0342	0.114		2
06148	Vanadium	7440-62-2	102		0.0251	0.114		2
06149	Zinc	7440-66-6	195		1.60	8.55		5
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0303	J	0.0031	0.109		1
Wet Chemistry	**EPA 300.0**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	3.7		0.92	1.2		1
07336	11a Anions by 300.0 - Nitrate	14797-55-8	1.2	J	0.92	1.7		1
	EPA 314.0		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	10.4	U	10.4	34.5		1
	SW-846 7199		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	1.0	J	0.23	1.2		1
	SW-846 9012B		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
05895	17a Cyanide by 9012B	57-12-5	0.20	U	0.20	0.56		1
	SW-846 9045C modified		**Std. Units**		**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	8.05		0.0100	0.0100		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**EPA 160.3 modified**		%	%	%	%	
11624	Moisture Content by 160.3	n.a.	13.1	0.50	0.50		1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.						

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11622	15a NDMA by 1625C	EPA 1625C	1	11146SLE026	06/10/2011 17:48	Matthew S Woods	1
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 18:44	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/09/2011 15:14	Joseph M Gambler	5
11630	NDMA Soil Microwave	SW-846 3546	1	11146SLE026	05/27/2011 14:30	Olivia I Santiago	1
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10132	16a Energetics by 8330A	SW-846 8330A	1	111510006A	06/03/2011 06:40	James H Place	1
04173	25a Formaldehyde 8315A	SW-846 8315A	1	111450003A	05/27/2011 10:19	Michele D Hamilton	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/27/2011 14:50	Michele D Hamilton	1
06557	6a Perchlorate EPA 6850	SW-846 6850 1/2007	1	111520014A	06/02/2011 22:17	Richard A Shober	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 12:34	Jamie L Brillhart	1
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 10:28	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
06568	Perchlorate Soil Prep	SW-846 6850 1/2007	1	111520014A	06/02/2011 09:15	Maria Davenport	1
05876	Formaldehyde Solid Extraction	SW-846 8315A	1	111450003A	05/25/2011 15:30	Wanda F Oswald	1
11137	Energetics Extraction	SW-846 8330	1	111510006A	05/31/2011 16:00	Kelli M Barto	1
10501	19a Alcohols by 8015B	SW-846 8015B	1	111450035A	05/25/2011 23:58	Tyler O Griffin	1
08283	21a Glycols by 8015B	SW-846 8015B modified	1	111450001A	05/26/2011 22:57	Dustin A Underkoffler	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10318	20a Terphenyls by 8015B	SW-846 8015B	1	111510027A	06/02/2011 22:22	Heather E Williams	1
10199	9a TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111480002A	06/01/2011 20:38	Heather E Williams	10
11238	EFH Extraction - Soils	SW-846 3550B	1	111480002A	05/31/2011 06:15	Joseph S Feister	1
10303	Terphenyls soil prep	SW-846 3550B	1	111510027A	06/01/2011 08:45	Katheryne V Sponheimer	1
00380	Solids Extraction for Alcohols	SW-846 8015B	1	111450035A	05/25/2011 17:55	Tyler O Griffin	1
11551	Solids Glycol Extraction	SW-846 8015B modified	1	111450001A	05/26/2011 12:00	Dustin A Underkoffler	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/02/2011 08:52	Eric L Eby	2
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:15	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:19	Choon Y Tian	5
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 00:35	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 00:35	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 07:41	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 07:41	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 07:41	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:19	Choon Y Tian	5
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 14:54	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	06/01/2011 00:14	Ashley M Adams	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: DUP05-SA5DN-QC-052311 Soil
SSFL Area IV Collocated Soil Sampling
DUP05-SA5DN-QC-052311

LLI Sample # SW 6296054
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 09:35

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

DUP05 SDG#: DE159-17FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07336	11a Anions by 300.0 - Nitrate	EPA 300.0	1	11151621202B	06/01/2011 00:14	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 22:56	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	2	11152243201A	06/03/2011 18:50	Elyse P Brunstetter	1
05895	17a Cyanide by 9012B	SW-846 9012B	1	11151102201A	05/31/2011 19:44	Venia B McFadden	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	11151102201A	05/31/2011 16:10	Carolyn M Mastropietro	1
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	1	11160162402B	06/09/2011 21:05	Scott W Freisher	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles EPA 1625C			**ng/l**		**ng/l**	**ng/l**	**ng/l**	
10962	N-Nitrosodimethylamine	62-75-9	2.07		0.493	0.985		1
GC/MS Semivolatiles SW-846 8270C			**ug/l**		**ug/l**	**ug/l**	**ug/l**	
04678	Aniline	62-53-3	1	U	1	5		1
04678	Benzidine	92-87-5	20	U	20	59		1
04678	Benzoic acid	65-85-0	6	U	6	15		1
04678	Benzyl alcohol	100-51-6	5	U	5	15		1
04678	4-Bromophenyl-phenylether	101-55-3	1	U	1	5		1
04678	Carbazole	86-74-8	1	U	1	5		1
04678	4-Chloro-3-methylphenol	59-50-7	1	U	1	5		1
04678	4-Chloroaniline	106-47-8	1	U	1	5		1
04678	bis(2-Chloroethoxy)methane	111-91-1	1	U	1	5		1
04678	bis(2-Chloroethyl)ether	111-44-4	1	U	1	5		1
04678	bis(2-Chloroisopropyl)ether	39638-32-9	1	U	1	5		1
04678	2-Chloronaphthalene	91-58-7	2	U	2	5		1
04678	2-Chlorophenol	95-57-8	1	U	1	5		1
04678	4-Chlorophenyl-phenylether	7005-72-3	2	U	2	5		1
04678	Dibenzofuran	132-64-9	1	U	1	5		1
04678	1,2-Dichlorobenzene	95-50-1	1	U	1	5		1
04678	1,3-Dichlorobenzene	541-73-1	1	U	1	5		1
04678	1,4-Dichlorobenzene	106-46-7	1	U	1	5		1
04678	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5		1
04678	2,4-Dichlorophenol	120-83-2	1	U	1	5		1
04678	2,4-Dimethylphenol	105-67-9	3	U	3	10		1
04678	3,5-Dimethylphenol	108-68-9	3	U	3	10		1
04678	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	15		1
04678	2,4-Dinitrophenol	51-28-5	10	U	10	29		1
04678	2,4-Dinitrotoluene	121-14-2	1	U	1	5		1
04678	2,6-Dinitrotoluene	606-20-2	1	U	1	5		1
04678	1,2-Diphenylhydrazine	122-66-7	1	U	1	5		1
04678	Hexachlorobenzene	118-74-1	1	U	1	5		1
04678	Hexachlorobutadiene	87-68-3	1	U	1	5		1
04678	Hexachlorocyclopentadiene	77-47-4	5	U	5	15		1
04678	Hexachloroethane	67-72-1	1	U	1	5		1
04678	Isophorone	78-59-1	1	U	1	5		1
04678	2-Methylphenol	95-48-7	1	U	1	5		1
04678	4-Methylphenol	106-44-5	2	U	2	5		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04678	2-Nitroaniline	88-74-4	1	U	1	5		1
04678	3-Nitroaniline	99-09-2	1	U	1	5		1
04678	4-Nitroaniline	100-01-6	1	U	1	5		1
04678	Nitrobenzene	98-95-3	1	U	1	5		1
04678	2-Nitrophenol	88-75-5	1	U	1	5		1
04678	4-Nitrophenol	100-02-7	10	U	10	29		1
04678	N-Nitroso-di-n-propylamine	621-64-7	1	U	1	5		1
04678	N-Nitrosodiphenylamine	86-30-6	2	U	2	5		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04678	Pentachlorophenol	87-86-5	3	U	3	15		1
04678	Phenol	108-95-2	1	U	1	5		1
04678	1,2,4-Trichlorobenzene	120-82-1	1	U	1	5		1
04678	2,4,5-Trichlorophenol	95-95-4	1	U	1	5		1
04678	2,4,6-Trichlorophenol	88-06-2	1	U	1	5		1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10137	Acenaphthene	83-32-9	0.0098	U	0.0098	0.049		1
10137	Acenaphthylene	208-96-8	0.0098	U	0.0098	0.049		1
10137	Anthracene	120-12-7	0.0098	U	0.0098	0.049		1
10137	Benzo(a)anthracene	56-55-3	0.0098	U	0.0098	0.049		1
10137	Benzo(a)pyrene	50-32-8	0.0098	U	0.0098	0.049		1
10137	Benzo(b)fluoranthene	205-99-2	0.0098	U	0.0098	0.049		1
10137	Benzo(g,h,i)perylene	191-24-2	0.0098	U	0.0098	0.049		1
10137	Benzo(k)fluoranthene	207-08-9	0.0098	U	0.0098	0.049		1
10137	Butylbenzylphthalate	85-68-7	0.073	J	0.049	0.98		1
10137	Di-n-butylphthalate	84-74-2	0.13	J	0.049	0.98		1
10137	Chrysene	218-01-9	0.0098	U	0.0098	0.049		1
10137	Dibenz(a,h)anthracene	53-70-3	0.0098	U	0.0098	0.049		1
10137	Diethylphthalate	84-66-2	0.049	U	0.049	0.98		1
10137	Dimethylphthalate	131-11-3	0.049	U	0.049	0.98		1
10137	Bis(2-Ethylhexyl)phthalate	117-81-7	0.21	J	0.049	0.98		1
10137	Fluoranthene	206-44-0	0.0098	U	0.0098	0.049		1
10137	Fluorene	86-73-7	0.0098	U	0.0098	0.049		1
10137	Indeno(1,2,3-cd)pyrene	193-39-5	0.0098	U	0.0098	0.049		1
10137	1-Methylnaphthalene	90-12-0	0.034	J	0.0098	0.049		1
10137	2-Methylnaphthalene	91-57-6	0.034	J	0.0098	0.049		1
10137	Naphthalene	91-20-3	0.23		0.029	0.049		1
10137	N-Nitrosodimethylamine	62-75-9	0.0098	U	0.0098	0.049		1
10137	Di-n-octylphthalate	117-84-0	0.049	U	0.049	0.98		1
10137	Phenanthrene	85-01-8	0.0098	U	0.0098	0.049		1
10137	Pyrene	129-00-0	0.0098	U	0.0098	0.049		1
Explosives	**SW-846 8330A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10131	4-Amino-2,6-Dinitrotoluene	19406-51-0	0.30	U	0.30	0.60	10000000	1
10131	2-Amino-4,6-Dinitrotoluene	35572-78-2	0.20	U	0.20	0.60	10000000	1
10131	2,6-Diamino-4-nitrotoluene	59229-75-3	0.20	U	0.20	0.60	10000000	1
10131	2,4-Diamino-6-nitrotoluene	6629-29-4	0.20	U	0.20	0.60	10000000	1
10131	1,3-Dinitrobenzene	99-65-0	0.20	U	0.20	0.60	10000000	1
10131	2,4-Dinitrotoluene	121-14-2	0.20	U	0.20	0.60	10000000	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Explosives	**SW-846 8330A**		ug/l		ug/l	ug/l	ug/l	
10131	2,6-Dinitrotoluene	606-20-2	0.20	U	0.20	0.60	10000000	1
10131	HMX	2691-41-0	0.65	U	0.65	2.0	10000000	1
10131	Nitrobenzene	98-95-3	0.20	U	0.20	0.60	10000000	1
10131	Nitroglycerin	55-63-0	5.2	U	5.2	15	10000000	1
10131	2-Nitrotoluene	88-72-2	0.20	U	0.20	0.60	10000000	1
10131	3-Nitrotoluene	99-08-1	0.40	U	0.40	1.2	10000000	1
10131	4-Nitrotoluene	99-99-0	0.60	U	0.60	1.2	10000000	1
10131	PETN	78-11-5	6.0	U	6.0	18	10000000	1
10131	RDX	121-82-4	0.20	U	0.20	0.60	10000000	1
10131	Tetryl	479-45-8	0.40	U	0.40	0.60	10000000	1
10131	1,3,5-Trinitrobenzene	99-35-4	0.20	U	0.20	0.60	10000000	1
10131	2,4,6-Trinitrotoluene	118-96-7	0.20	U	0.20	0.60	10000000	1
Herbicides	**SW-846 8151A**		ug/l		ug/l	ug/l	ug/l	
10407	2,4-D	94-75-7	0.16	U	0.16	0.49		1
10407	Dalapon	75-99-0	0.25	U	0.25	1.2		1
10407	2,4-DB	94-82-6	0.30	U	0.30	0.98		1
10407	Dicamba	1918-00-9	0.079	U	0.079	0.30		1
10407	Dinoseb	88-85-7	0.098	U	0.098	0.49		1
10407	2,4-DP (Dichlorprop)	120-36-5	0.16	U	0.16	0.49		1
10407	MCPA	94-74-6	300	U	300	980		1
10407	MCPP	93-65-2	49	U	49	200		1
10407	2,4,5-T	93-76-5	0.015	U	0.015	0.049		1
10407	2,4,5-TP	93-72-1	0.0098	U	0.0098	0.049		1
HPLC Organics	**SW-846 8315A**		ug/l		ug/l	ug/l	ug/l	
04144	25b Formaldehyde 8315A	50-00-0	10	U	10	50		1
	The LCS/LCSD recovery for formaldehyde is outside the QC limits. Results from the reextraction are within the limits. The hold time had expired prior to the reextraction so all results are reported from the original extract. Similar results were obtained in both extracts.							
Pesticides/PCBs	**SW-846 8081A**		ug/l		ug/l	ug/l	ug/l	
00177	Aldrin	309-00-2	0.0020	U	0.0020	0.0098		1
00177	Alpha BHC	319-84-6	0.0029	U	0.0029	0.0098		1
00177	Beta BHC	319-85-7	0.0028	U	0.0028	0.0098		1
00177	Gamma BHC - Lindane	58-89-9	0.0020	U	0.0020	0.0098		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8081A**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
00177	Chlordane	57-74-9	0.12	U	0.12	0.49		1
00177	p,p-DDD	72-54-8	0.0049	U	0.0049	0.020		1
00177	p,p-DDE	72-55-9	0.0049	U	0.0049	0.020		1
00177	p,p-DDT	50-29-3	0.0049	U	0.0049	0.020		1
00177	Delta BHC	319-86-8	0.0028	U	0.0028	0.0098		1
00177	Dieldrin	60-57-1	0.0052	U	0.0052	0.020		1
00177	Endosulfan I	959-98-8	0.0042	U	0.0042	0.0098		1
00177	Endosulfan II	33213-65-9	0.015	U	0.015	0.020		1
00177	Endosulfan Sulfate	1031-07-8	0.0057	U	0.0057	0.020		1
00177	Endrin	72-20-8	0.0079	U	0.0079	0.020		1
00177	Endrin Aldehyde	7421-93-4	0.020	U	0.020	0.098		1
00177	Endrin Ketone	53494-70-5	0.0049	U	0.0049	0.020		1
00177	Heptachlor	76-44-8	0.0025	U	0.0025	0.0098		1
00177	Heptachlor Epoxide	1024-57-3	0.0022	U	0.0022	0.0098		1
00177	Methoxychlor	72-43-5	0.029	U	0.029	0.098		1
00177	Mirex	2385-85-5	0.083	U	0.083	0.24		1
00177	Toxaphene	8001-35-2	0.98	U	0.98	2.9		1
Pesticides/PCBs	**SW-846 8082**		**ug/l**		**ug/l**	**ug/l**	**ug/l**	
10227	Aroclor 5432	63496-31-1	0.098	U	0.098	0.49		1
10227	Aroclor 5442	12642-23-8	0.098	U	0.098	0.49		1
10227	Aroclor 5460	11126-42-4	0.098	U	0.098	0.49		1
10227	PCB-1016	12674-11-2	0.098	U	0.098	0.49		1
10227	PCB-1221	11104-28-2	0.098	U	0.098	0.49		1
10227	PCB-1232	11141-16-5	0.20	U	0.20	0.49		1
10227	PCB-1242	53469-21-9	0.098	U	0.098	0.49		1
10227	PCB-1248	12672-29-6	0.098	U	0.098	0.49		1
10227	PCB-1254	11097-69-1	0.098	U	0.098	0.49		1
10227	PCB-1260	11096-82-5	0.15	U	0.15	0.49		1
10227	PCB-1262	37324-23-5	0.20	U	0.20	0.49		1
10227	PCB-1268	11100-14-4	0.16	U	0.16	0.49		1
GC Petroleum Hydrocarbons	**SW-846 8015B**		**mg/l**		**mg/l**	**mg/l**	**mg/l**	
10319	m-Terphenyl	92-06-8	0.078	U	0.078	0.24		1
10319	o-Terphenyl	84-15-1	0.078	U	0.078	0.24		1
10319	p-Terphenyl	92-94-4	0.078	U	0.078	0.24		1
	The surrogate data is outside the QC limits. Due to insufficient sample volume, a repeat analysis could not be performed to confirm the results.							
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/l**		**mg/l**	**mg/l**	**mg/l**	
10365	EFH (C12-C14)	n.a.	0.097	U	0.097	0.58		1
10365	EFH (C15-C20)	n.a.	0.097	U	0.097	0.58		1
10365	EFH (C21-C30)	n.a.	0.097	U	0.097	0.58		1
10365	EFH (C30 - C40)	n.a.	0.097	U	0.097	0.58		1
10365	EFH (C8-C11)	n.a.	0.097	U	0.097	0.58		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.0834 U	0.0834	0.200		1
08014	Boron	7440-42-8	0.0138 U	0.0138	0.0500		1
01750	Calcium	7440-70-2	0.0702 U	0.0702	0.200		1
01754	Iron	7439-89-6	0.0522 U	0.0522	0.200		1
01756	Lithium	7439-93-2	0.0024 U	0.0024	0.0200		1
01757	Magnesium	7439-95-4	0.0172 U	0.0172	0.100		1
07058	Manganese	7439-96-5	0.00084 U	0.00084	0.0050		1
10143	Phosphorus	7723-14-0	0.0089 U	0.0089	0.100		1
01762	Potassium	7440-09-7	0.239 U	0.239	0.500		1
01767	Sodium	7440-23-5	0.433 U	0.433	1.00		1
08068	Strontium	7440-24-6	0.00089 U	0.00089	0.0050		1
07069	Tin	7440-31-5	0.0098 U	0.0098	0.0200		1
07070	Titanium	7440-32-6	0.0038 U	0.0038	0.0100		1
10144	Zirconium	7440-67-7	0.0206 U	0.0206	0.0500		1
	SW-846 6020		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
06024	Antimony	7440-36-0	0.00030 U	0.00030	0.0010		1
06025	Arsenic	7440-38-2	0.00095 U	0.00095	0.0020		1
06026	Barium	7440-39-3	0.00053 U	0.00053	0.0020		1
06027	Beryllium	7440-41-7	0.00013 U	0.00013	0.00050		1
06028	Cadmium	7440-43-9	0.00020 U	0.00020	0.00050		1
06031	Chromium	7440-47-3	0.00060 U	0.00060	0.0020		1
06032	Cobalt	7440-48-4	0.00010 U	0.00010	0.00050		1
06033	Copper	7440-50-8	0.00038 U	0.00038	0.0020		1
06035	Lead	7439-92-1	0.000052 U	0.000052	0.0010		1
06038	Molybdenum	7439-98-7	0.00025 U	0.00025	0.00050		1
06039	Nickel	7440-02-0	0.00050 U	0.00050	0.0020		1
06041	Selenium	7782-49-2	0.00025 U	0.00025	0.0020		1
06042	Silver	7440-22-4	0.000080 U	0.000080	0.00050		1
06045	Thallium	7440-28-0	0.00015 U	0.00015	0.00050		1
06048	Vanadium	7440-62-2	0.00016 U	0.00016	0.00050		1
06049	Zinc	7440-66-6	0.0040 U	0.0040	0.0150		1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.000046 U	0.000046	0.00020		1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
01504	11b Anions by 300.0 - Fluoride	16984-48-8	0.080 U	0.080	0.10		1
	EPA 314.0		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06019	7b Perchlorate EPA 314.0	14797-73-0	0.70 U	0.70	2.0		1
	SW-846 7199		**ug/l**	**ug/l**	**ug/l**	**ug/l**	
06467	3b Cr VI by EPA 7199	18540-29-9	5.0 U	5.0	10.0		1
	SW-846 9012B		**mg/l**	**mg/l**	**mg/l**	**mg/l**	
08255	17b Cyanide by 9012B	57-12-5	0.0050 U	0.0050	0.010		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Action Limit	Dilution Factor
Wet Chemistry	**SW-846 9040B**		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00200	18b pH by 9040B	n.a.	5.4	0.010	0.010		1

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10962	15b NDMA by 1625C	EPA 1625C	1	11144WAA026	05/25/2011 19:09	Gregory J Drahovsky	1
04678	5b Semivolatiles by EPA 8270C	SW-846 8270C	1	11146WAD026	06/06/2011 00:06	Linda M Hartenstine	1
10137	4b Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11144WAK026	05/26/2011 13:29	Joseph M Gambler	1
00813	BNA Water Extraction	SW-846 3510C	1	11146WAD026	05/26/2011 16:00	Timothy J Attenberger	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	11144WAK026	05/25/2011 09:50	Catherine R Wiker	1
11629	NDMA Liquid/Liquid Extraction	SW-846 3520C	1	11144WAA026	05/24/2011 13:25	Wanda F Oswald	1
10131	16b Energetics by 8330A	SW-846 8330A	1	111580002A	06/09/2011 00:05	Michele D Hamilton	1
04144	25b Formaldehyde 8315A	SW-846 8315A	1	111440027A	05/27/2011 00:09	Michele D Hamilton	1
10407	13b Herbicides by EPA 8151	SW-846 8151A	1	111450014A	05/27/2011 00:36	Michele D Hamilton	1
00177	12b Pesticides by 8081A	SW-846 8081A	1	111460040A	06/03/2011 06:26	Lisa A Reinert	1
10227	8b PCBs/PCTs by 8082	SW-846 8082	1	111460041A	05/28/2011 14:10	Richard A Shober	1
11117	PCB Waters Extraction	SW-846 3510C	1	111460041A	05/27/2011 14:00	Kelli M Barto	1
11118	Pesticide Screen Waters Ext	SW-846 3510C	1	111460040A	05/27/2011 14:00	Kelli M Barto	1
00816	Water Sample Herbicide Extract	SW-846 8151A	1	111450014A	05/25/2011 20:00	Elaine F Stoltzfus	1
01013	Formaldehyde Extraction	SW-846 8315A	1	111440027A	05/25/2011 08:30	Denise L Trimby	1
11122	Energetics Extraction	SW-846 8330	2	111580002A	06/07/2011 18:00	Kelli M Barto	1
10319	20b Terphenyls by 8015B	SW-846 8015B	1	111450009A	05/26/2011 19:06	Heather E Williams	1
10365	9b TPH by EPA 8015B Oil/Diesel	SW-846 8015B modified	1	111450031A	06/03/2011 01:53	Heather E Williams	1
11203	EFH Waters Extraction	SW-846 3510C	1	111450031A	05/26/2011 08:00	Catherine R Wiker	1
10304	Terphenyls water prep	SW-846 3510C	1	111450009A	05/25/2011 17:30	Kathryn I DeHaven	1
01743	Aluminum	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
08014	Boron	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: EB05-SA5DN-SS-052311 Water
SSFL Area IV Collocated Soil Sampling
EB05-SA5DN-SS-052311

LLI Sample # WW 6296055
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 14:05

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

EB-05 SDG#: DE159-18EB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01756	Lithium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
07058	Manganese	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
10143	Phosphorus	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01762	Potassium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
01767	Sodium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
08068	Strontium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
07069	Tin	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
07070	Titanium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
10144	Zirconium	SW-846 6010B	1	111441848008	05/26/2011 04:05	Tara L Snyder	1
06024	Antimony	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06025	Arsenic	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06026	Barium	SW-846 6020	1	111446050005D	05/27/2011 17:11	Choon Y Tian	1
06027	Beryllium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06028	Cadmium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06031	Chromium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06032	Cobalt	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06033	Copper	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06035	Lead	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06038	Molybdenum	SW-846 6020	1	111446050005C	05/27/2011 17:11	Choon Y Tian	1
06039	Nickel	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06041	Selenium	SW-846 6020	1	111446050005B	05/27/2011 17:11	Choon Y Tian	1
06042	Silver	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06045	Thallium	SW-846 6020	2	111536050004A	06/03/2011 06:49	Choon Y Tian	1
06048	Vanadium	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
06049	Zinc	SW-846 6020	1	111446050005A	05/27/2011 17:11	Choon Y Tian	1
00259	Mercury	SW-846 7470A	2	111465713002	05/31/2011 15:11	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	111441848008	05/25/2011 10:52	James L Mertz	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	1	111446050005	05/25/2011 11:46	James L Mertz	1
06050	ICP/MS SW-846 Water Digest	SW-846 3020A	2	111536050004	06/02/2011 23:00	Mirit S Shenouda	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	111465713002	05/26/2011 15:20	Nelli S Markaryan	1
01504	11b Anions by 300.0 - Fluoride	EPA 300.0	1	11144196901B	05/25/2011 05:58	Ashley M Adams	1
06019	7b Perchlorate EPA 314.0	EPA 314.0	1	11154621701A	06/03/2011 15:31	William L Hamaker Jr	1
06467	3b Cr VI by EPA 7199	SW-846 7199	1	11143495401B	05/24/2011 11:58	Parker D Lindstrom	1
08255	17b Cyanide by 9012B	SW-846 9012B	1	11146117101B	05/26/2011 19:00	Joseph E McKenzie	1
08256	Cyanide Water Distillation	SW-846 9012B	1	11146117101B	05/26/2011 09:40	Nancy J Shoop	1
00200	18b pH by 9040B	SW-846 9040B	1	11144020001A	05/24/2011 19:50	Luz M Groff	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles SW-846 8270C			ug/kg		ug/kg	ug/kg	ug/kg	
04688	Aniline	62-53-3	280	U	280	830		1
04688	Benzidine	92-87-5	1,900	U	1,900	5,500		1
04688	Benzoic acid	65-85-0	280	U	280	830		1
04688	Benzyl alcohol	100-51-6	280	U	280	830		1
04688	4-Bromophenyl-phenylether	101-55-3	28	U	28	280		1
04688	Butylbenzylphthalate	85-68-7	28	U	28	280		1
04688	Di-n-butylphthalate	84-74-2	28	U	28	280		1
04688	Carbazole	86-74-8	28	U	28	280		1
04688	4-Chloro-3-methylphenol	59-50-7	55	U	55	280		1
04688	4-Chloroaniline	106-47-8	110	U	110	280		1
04688	bis(2-Chloroethoxy)methane	111-91-1	28	U	28	280		1
04688	bis(2-Chloroethyl)ether	111-44-4	28	U	28	280		1
04688	bis(2-Chloroisopropyl)ether	39638-32-9	28	U	28	280		1
04688	2-Chloronaphthalene	91-58-7	28	U	28	280		1
04688	2-Chlorophenol	95-57-8	28	U	28	280		1
04688	4-Chlorophenyl-phenylether	7005-72-3	55	U	55	280		1
04688	Dibenzofuran	132-64-9	28	U	28	280		1
04688	1,2-Dichlorobenzene	95-50-1	28	U	28	280		1
04688	1,3-Dichlorobenzene	541-73-1	28	U	28	280		1
04688	1,4-Dichlorobenzene	106-46-7	28	U	28	280		1
04688	3,3'-Dichlorobenzidine	91-94-1	170	U	170	550		1
04688	2,4-Dichlorophenol	120-83-2	28	U	28	280		1
04688	Diethylphthalate	84-66-2	28	U	28	280		1
04688	2,4-Dimethylphenol	105-67-9	55	U	55	280		1
04688	3,5-Dimethylphenol	108-68-9	55	U	55	280		1
04688	Dimethylphthalate	131-11-3	28	U	28	280		1
04688	4,6-Dinitro-2-methylphenol	534-52-1	280	U	280	830		1
04688	2,4-Dinitrophenol	51-28-5	550	U	550	1,700		1
04688	2,4-Dinitrotoluene	121-14-2	55	U	55	280		1
04688	2,6-Dinitrotoluene	606-20-2	28	U	28	280		1
04688	1,2-Diphenylhydrazine	122-66-7	28	U	28	280		1
04688	bis(2-Ethylhexyl)phthalate	117-81-7	28	U	28	550		1
04688	Fluoranthene	206-44-0	53	J	28	280		1
04688	Hexachlorobenzene	118-74-1	28	U	28	280		1
04688	Hexachlorobutadiene	87-68-3	110	U	110	280		1
04688	Hexachlorocyclopentadiene	77-47-4	280	U	280	830		1
04688	Hexachloroethane	67-72-1	28	U	28	280		1
04688	Isophorone	78-59-1	28	U	28	280		1
04688	2-Methylphenol	95-48-7	55	U	55	280		1
04688	4-Methylphenol	106-44-5	55	U	55	280		1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.							
04688	2-Nitroaniline	88-74-4	28	U	28	280		1
04688	3-Nitroaniline	99-09-2	55	U	55	280		1
04688	4-Nitroaniline	100-01-6	110	U	110	280		1
04688	Nitrobenzene	98-95-3	28	U	28	280		1
04688	2-Nitrophenol	88-75-5	28	U	28	280		1
04688	4-Nitrophenol	100-02-7	280	U	280	830		1
04688	N-Nitroso-di-n-propylamine	621-64-7	28	U	28	280		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
04688	N-Nitrosodiphenylamine	86-30-6	28	U	28	280		1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.							
04688	Di-n-octylphthalate	117-84-0	28	U	28	280		1
04688	Pentachlorophenol	87-86-5	280	U	280	830		1
04688	Phenanthrene	85-01-8	35	J	28	280		1
04688	Phenol	108-95-2	28	U	28	280		1
04688	Pyrene	129-00-0	48	J	28	280		1
04688	1,2,4-Trichlorobenzene	120-82-1	28	U	28	280		1
04688	2,4,5-Trichlorophenol	95-95-4	55	U	55	280		1
04688	2,4,6-Trichlorophenol	88-06-2	55	U	55	280		1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: 2-nitrophenol 4-bromophenyl-phenylether hexachlorobenzene hexachlorobutadiene							
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10138	Acenaphthene	83-32-9	5.5	U	5.5	14		5
10138	Acenaphthylene	208-96-8	2.7	U	2.7	14		5
10138	Anthracene	120-12-7	2.7	U	2.7	14		5
10138	Benzo(a)anthracene	56-55-3	12	J	5.5	14		5
10138	Benzo(a)pyrene	50-32-8	18		5.5	14		5
10138	Benzo(b)fluoranthene	205-99-2	33		5.5	14		5
10138	Benzo(g,h,i)perylene	191-24-2	10	J	5.5	14		5
10138	Benzo(k)fluoranthene	207-08-9	9.4	J	5.5	14		5
10138	Chrysene	218-01-9	20		2.7	14		5
10138	Dibenz(a,h)anthracene	53-70-3	5.5	U	5.5	14		5
10138	Fluorene	86-73-7	5.5	U	5.5	14		5
10138	Indeno(1,2,3-cd)pyrene	193-39-5	8.7	J	5.5	14		5
10138	1-Methylnaphthalene	90-12-0	5.5	U	5.5	14		5
10138	2-Methylnaphthalene	91-57-6	5.5	U	5.5	14		5
10138	Naphthalene	91-20-3	5.5	U	5.5	14		5
10138	N-Nitrosodimethylamine	62-75-9	5.5	U	5.5	14		5
	Reporting limits were raised due to interference from the sample matrix.							
Herbicides	**SW-846 8151A**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10401	2,4-D	94-75-7	20	U	20	59		10
10401	Dalapon	75-99-0	72	U	72	150		10
10401	2,4-DB	94-82-6	10	U	10	28		10
10401	Dicamba	1918-00-9	6.6	U	6.6	20		10
10401	Dinoseb	88-85-7	13	U	13	40		10
10401	2,4-DP (Dichlorprop)	120-36-5	13	U	13	28		10
10401	MCPA	94-74-6	1,300	U	1,300	4,100		10
10401	MCPP (Mecoprop)	93-65-2	16,000	U	16,000	16,000		10

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Herbicides	**SW-846 8151A**		ug/kg		ug/kg	ug/kg	ug/kg	
10401	2,4,5-T	93-76-5	1.5	U	1.5	2.8		10
10401	2,4,5-TP	93-72-1	2.0	J	1.2	2.8		10

Reporting limits were raised due to interference from the sample matrix.

When the concentration detected on the primary and confirmation column is significantly different, some uncertainty as to the presence and concentration of the compound exists. In these cases, the reporting limits have been raised. The following compounds were affected: MCPP and 2,4,5-T

Pesticides/PCBs	**SW-846 8081A**		ug/kg		ug/kg	ug/kg	ug/kg	
01363	Aldrin	309-00-2	0.11	U	0.11	0.27		1
01363	Alpha BHC	319-84-6	0.56	U	0.56	2.7		10
01363	Beta BHC	319-85-7	0.99	U	0.99	2.7		10
01363	Gamma BHC - Lindane	58-89-9	3.2	U	3.2	3.2		10
01363	Chlordane	57-74-9	7.3	U	7.3	7.3		1
01363	p,p-DDD	72-54-8	0.11	U	0.11	0.56		1
01363	p,p-DDE	72-55-9	0.60	U	0.60	0.60		1
01363	p,p-DDT	50-29-3	0.52	J	0.11	0.56		1
01363	Delta BHC	319-86-8	0.60	U	0.60	2.7		10
01363	Dieldrin	60-57-1	0.28	U	0.28	0.56		1
01363	Endosulfan I	959-98-8	0.073	U	0.073	0.27		1
01363	Endosulfan II	33213-65-9	0.11	U	0.11	0.56		1
01363	Endosulfan Sulfate	1031-07-8	0.11	U	0.11	0.56		1
01363	Endrin	72-20-8	0.11	U	0.11	0.56		1
01363	Endrin Aldehyde	7421-93-4	0.11	U	0.11	0.56		1
01363	Endrin Ketone	53494-70-5	0.11	U	0.11	0.56		1
01363	Heptachlor	76-44-8	0.099	U	0.099	0.27		1
01363	Heptachlor Epoxide	1024-57-3	0.056	U	0.056	0.27		1
01363	Methoxychlor	72-43-5	0.56	U	0.56	2.7		1
01363	Mirex	2385-85-5	0.18	U	0.18	0.56		1
01363	Toxaphene	8001-35-2	3.6	U	3.6	11		1

The sample was injected numerous times. Each time the responses for various analytes in the calibration check standard injected after the sample were outside the acceptance criteria. Therefore, this effect is attributed to the sample matrix and the data is reported.

The tetrachloro-m-xylene surrogate recovery is outside the lower QC limit for the associated method blank. The samples were reextracted outside the method hold time. The surrogate recoveries for the method blank associated with the reextraction are within the QC limits. Similar sample results are observed for both.

Reporting limits were raised due to interference from the sample matrix.

The surrogate recovery for the reextract is low.

Pesticides/PCBs	**SW-846 8082**		ug/kg		ug/kg	ug/kg	ug/kg	
10225	Aroclor 5432	63496-31-1	1.7	U	1.7	5.5		1
10225	Aroclor 5442	12642-23-8	1.7	U	1.7	5.5		1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Pesticides/PCBs	**SW-846 8082**		**ug/kg**		**ug/kg**	**ug/kg**	**ug/kg**	
10225	Aroclor 5460	11126-42-4	3.9	J	1.7	5.5		1
10225	PCB-1016	12674-11-2	0.55	U	0.55	2.8		1
10225	PCB-1221	11104-28-2	0.55	U	0.55	2.8		1
10225	PCB-1232	11141-16-5	0.55	U	0.55	2.8		1
10225	PCB-1242	53469-21-9	0.55	U	0.55	2.8		1
10225	PCB-1248	12672-29-6	6.8		0.55	2.8		1
10225	PCB-1254	11097-69-1	0.55	U	0.55	2.8		1
10225	PCB-1260	11096-82-5	3.2		0.65	2.8		1
10225	PCB-1262	37324-23-5	0.55	U	0.55	2.8		1
10225	PCB-1268	11100-14-4	0.55	U	0.55	2.8		1
Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	Aluminum	7429-90-5	10,600		8.33	33.1		1
07914	Boron	7440-42-8	1.47	U	1.47	8.28		1
01650	Calcium	7440-70-2	11,800		10.1	33.1		1
01654	Iron	7439-89-6	14,800		7.80	33.1		1
01656	Lithium	7439-93-2	15.9		0.36	3.3		1
01657	Magnesium	7439-95-4	3,220		4.21	16.6		1
06958	Manganese	7439-96-5	232		0.129	0.828		1
10145	Phosphorus	7723-14-0	509		0.927	16.6		1
01662	Potassium	7440-09-7	2,260		29.8	82.8		1
01667	Sodium	7440-23-5	161	J	61.8	166		1
07968	Strontium	7440-24-6	37.7		0.103	0.828		1
06969	Tin	7440-31-5	3.38	J	1.66	16.6		1
06970	Titanium	7440-32-6	912		0.629	1.66		1
10146	Zirconium	7440-67-7	2.73	J	1.39	8.28		1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	Antimony	7440-36-0	0.437		0.0974	0.325		2
	Due to the nature of the EPA Method 3050B digestion procedure for ICP-MS, the Laboratory Control Standard and Matrix Spike(s) may exhibit low recoveries for antimony.							
06125	Arsenic	7440-38-2	4.36		0.130	0.649		2
06126	Barium	7440-39-3	110		0.175	0.649		2
06127	Beryllium	7440-41-7	0.480		0.0260	0.162		2
06128	Cadmium	7440-43-9	0.732		0.0649	0.162		2
06131	Chromium	7440-47-3	15.4		0.195	0.649		2
06132	Cobalt	7440-48-4	3.92		0.0325	0.162		2
06133	Copper	7440-50-8	13.1		0.107	0.649		2
06135	Lead	7439-92-1	21.0		0.0169	0.325		2
06138	Molybdenum	7439-98-7	1.59		0.0812	0.162		2
06139	Nickel	7440-02-0	13.5		0.162	0.649		2
06141	Selenium	7782-49-2	0.220	J	0.0649	0.649		2
06142	Silver	7440-22-4	0.315		0.0195	0.162		2
06145	Thallium	7440-28-0	0.265		0.0487	0.162		2
06148	Vanadium	7440-62-2	34.3		0.0357	0.162		2
06149	Zinc	7440-66-6	209		0.909	4.87		2
	SW-846 7471A		**mg/kg**		**mg/kg**	**mg/kg**	**mg/kg**	

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Action Limit	Dilution Factor
Metals	**SW-846 7471A**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0187 J	0.0047	0.163		1
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
07332	11a Anions by 300.0 - Fluoride	16984-48-8	2.9	1.3	1.7		1
	EPA 314.0		**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	
10147	7a Perchlorate EPA 314.0	14797-73-0	14.9 U	14.9	49.7		1
	SW-846 7199		**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	
05892	3a Cr VI by EPA 7199	18540-29-9	0.33 U	0.33	1.7		1
	SW-846 9045C modified		**Std. Units**	**Std. Units**	**Std. Units**	**Std. Units**	
00394	18a pH by 9045C	n.a.	7.19	0.0100	0.0100		1
Wet Chemistry	**EPA 160.3 modified**		**%**	**%**	**%**	**%**	
11624	Moisture Content by 160.3	n.a.	39.6	0.50	0.50		1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

State of California Lab Certification No. 2501

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04688	5a Semivolatiles by EPA 8270C	SW-846 8270C	1	11145SLD026	06/02/2011 19:10	Matthew S Woods	1
10138	4a Select SVOC EPA 8270SIM	SW-846 8270C SIM	1	11145SLF026	06/09/2011 15:44	Joseph M Gambler	5
10479	BNA Soil Extraction SIM	SW-846 3550B	1	11145SLF026	05/26/2011 09:15	Katheryne V Sponheimer	1
00381	BNA Soil Sonication	SW-846 3550B	1	11145SLD026	05/26/2011 09:15	Kerrie A Freeburn	1
10401	13a Herbicides by EPA 8151	SW-846 8151A	1	111450020A	05/31/2011 13:33	Michele D Hamilton	10
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 13:02	Jamie L Brillhart	1
01363	12a Pesticides by 8081A	SW-846 8081A	1	111470004A	06/04/2011 13:15	Jamie L Brillhart	10
10225	8a PCBs/PCTs by 8082	SW-846 8082	1	111460034A	06/03/2011 10:46	Richard A Shober	1
11134	Pesticide Screen Soils Ext	SW-846 3550B	1	111470004A	05/28/2011 10:50	Denise L Trimby	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	111460034A	05/27/2011 15:00	Sally L Appleyard	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
04181	Herbicide Soil Extraction	SW-846 3550B/SW-846 8151A	1	111450020A	05/25/2011 22:00	Karen L Beyer	1
01643	Aluminum	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
07914	Boron	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01650	Calcium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01654	Iron	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01656	Lithium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01657	Magnesium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06958	Manganese	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
10145	Phosphorus	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01662	Potassium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
01667	Sodium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
07968	Strontium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06969	Tin	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06970	Titanium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
10146	Zirconium	SW-846 6010B	1	111515708001	06/01/2011 20:54	John P Hook	1
06124	Antimony	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06125	Arsenic	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06126	Barium	SW-846 6020	1	111541026001D	06/06/2011 08:16	Choon Y Tian	2
06127	Beryllium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06128	Cadmium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	111541026001A	06/07/2011 01:04	David K Beck	2
06132	Cobalt	SW-846 6020	1	111541026001A	06/07/2011 01:04	David K Beck	2
06133	Copper	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06135	Lead	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06138	Molybdenum	SW-846 6020	1	111541026001C	06/06/2011 08:16	Choon Y Tian	2
06139	Nickel	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06141	Selenium	SW-846 6020	1	111541026001B	06/06/2011 08:16	Choon Y Tian	2
06142	Silver	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06145	Thallium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06148	Vanadium	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
06149	Zinc	SW-846 6020	1	111541026001A	06/06/2011 08:16	Choon Y Tian	2
00159	Mercury	SW-846 7471A	1	111515711001	06/01/2011 15:06	Nelli S Markaryan	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	111515708001	05/31/2011 20:18	Annamaria Stipkovits	1
11026	SW SW846 ICP-MS Digest	SW-846 3050B	1	111541026001	06/05/2011 21:37	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	111515711001	05/31/2011 10:08	Annamaria Stipkovits	1
07332	11a Anions by 300.0 - Fluoride	EPA 300.0	1	11151621202B	06/01/2011 00:29	Ashley M Adams	1
10147	7a Perchlorate EPA 314.0	EPA 314.0	1	11153621201B	06/05/2011 23:18	William L Hamaker Jr	1
05892	3a Cr VI by EPA 7199	SW-846 7199	1	11152243201A	06/03/2011 18:56	Elyse P Brunstetter	1
01352	11a Anions by 300.0 - Extract.	EPA 300.0	1	11151621202B	05/31/2011 07:15	William L Hamaker Jr	1
10129	7a Perchlorate EPA 314.0 Prep.	EPA 314.0	1	11153621201B	06/02/2011 08:45	William L Hamaker Jr	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

REVISED

Sample Description: SED-035-SIV-SD Sediment
SSFL Area IV Collocated Soil Sampling
SED-035-SIV-SD

LLI Sample # SW 6296056
LLI Group # 1248215
Account # 13013

Project Name: SSFL Area IV Collocated Soil Sampling

Collected: 05/23/2011 15:00

Submitted: 05/24/2011 09:40
Reported: 11/04/2011 11:53

CDM Federal Programs Corp.
14420 Albemarle Point Place
Suite 210
Chantilly VA 20151

SED35 SDG#: DE159-19*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00394	18a pH by 9045C	SW-846 9045C modified	1	11145039403B	05/25/2011 22:20	Luz M Groff	1
02432	3a Cr VI by EPA 7199 - Ext.	SW-846 3060A	2	11152243201A	06/01/2011 20:15	Daniel S Smith	1
11624	Moisture Content by 160.3	EPA 160.3 modified	2	11304162401A	10/31/2011 12:13	William C Schwebel	1

*=This limit was used in the evaluation of the final result
Shaded result = The results or reporting limit exceeded the client-provided action limit.

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B111471AA	Sample number(s): 6296035-6296037,6296039									
Acetone	9.6		6.7	8.0	ug/kg	159	153	32-209	4	30
Benzene	0.10	U	0.10	4.0	ug/kg	106	103	80-120	2	30
Bromobenzene	0.13	U	0.13	4.0	ug/kg	99	98	79-120	1	30
Bromochloromethane	0.33	U	0.33	4.0	ug/kg	106	101	79-124	5	30
Bromodichloromethane	0.08	U	0.08	4.0	ug/kg	100	96	78-120	4	30
Bromoform	0.40	U	0.40	4.0	ug/kg	94	93	70-120	1	30
Bromomethane	0.25	U	0.25	4.0	ug/kg	73	73	32-162	1	30
2-Butanone	1.2	U	1.2	8.0	ug/kg	134	124	46-153	8	30
n-Butylbenzene	0.12	U	0.12	4.0	ug/kg	102	102	72-120	0	30
sec-Butylbenzene	0.06	U	0.06	4.0	ug/kg	103	103	75-120	1	30
tert-Butylbenzene	0.16	U	0.16	4.0	ug/kg	102	100	75-120	2	30
Carbon Tetrachloride	0.14	U	0.14	4.0	ug/kg	105	99	69-122	6	30
Chlorobenzene	0.11	U	0.11	4.0	ug/kg	103	100	80-120	2	30
Chloroethane	0.13	U	0.13	4.0	ug/kg	67	67	37-154	0	30
2-Chloroethyl Vinyl Ether	0.30	U	0.30	4.0	ug/kg	95	91	43-146	5	30
Chloroform	0.12	U	0.12	4.0	ug/kg	107	101	80-120	6	30
Chloromethane	0.33	U	0.33	4.0	ug/kg	81	80	54-132	0	30
2-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	99	99	78-120	0	30
4-Chlorotoluene	0.14	U	0.14	4.0	ug/kg	103	102	79-120	1	30
Chlorotrifluoroethene	0.50	U	0.50	5.0	ug/kg	98	101	22-131	3	30
1,2-Dibromo-3-chloropropane	0.70	U	0.70	4.0	ug/kg	101	96	58-120	5	30
Dibromochloromethane	0.20	U	0.20	4.0	ug/kg	97	95	77-120	2	30
1,2-Dibromoethane	0.17	U	0.17	4.0	ug/kg	103	99	80-120	5	30
Dibromomethane	0.24	U	0.24	4.0	ug/kg	100	96	80-120	3	30
1,2-Dichlorobenzene	0.09	U	0.09	4.0	ug/kg	101	100	79-120	1	30
1,3-Dichlorobenzene	0.12	U	0.12	4.0	ug/kg	97	97	78-120	0	30
1,4-Dichlorobenzene	0.16	U	0.16	4.0	ug/kg	99	98	79-120	1	30
Dichlorodifluoromethane	0.12	U	0.12	4.0	ug/kg	71	67	20-120	6	30
1,1-Dichloroethane	0.10	U	0.10	4.0	ug/kg	106	102	80-120	4	30
1,2-Dichloroethane	0.15	U	0.15	4.0	ug/kg	106	103	71-129	2	30
1,1-Dichloroethene	0.39	U	0.39	4.0	ug/kg	108	103	73-123	5	30
cis-1,2-Dichloroethene	0.19	U	0.19	4.0	ug/kg	103	99	80-120	5	30
trans-1,2-Dichloroethene	0.12	U	0.12	4.0	ug/kg	104	100	79-120	4	30
1,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	102	99	80-120	2	30
1,3-Dichloropropane	0.08	U	0.08	4.0	ug/kg	104	101	80-120	3	30
2,2-Dichloropropane	0.17	U	0.17	4.0	ug/kg	100	96	72-123	4	30
1,1-Dichloropropene	0.13	U	0.13	4.0	ug/kg	106	102	77-120	4	30
cis-1,3-Dichloropropene	0.16	U	0.16	4.0	ug/kg	98	96	80-120	2	30
trans-1,3-Dichloropropene	0.17	U	0.17	4.0	ug/kg	95	93	77-120	2	30
Ethylbenzene	0.06	U	0.06	4.0	ug/kg	104	103	80-120	1	30
Freon 113	0.11	U	0.11	4.0	ug/kg	106	99	61-126	7	30
Freon 133a	0.50	U	0.50	5.0	ug/kg	77*	77*	78-120	0	30
Hexachlorobutadiene	0.14	U	0.14	4.0	ug/kg	89	90	57-120	0	30
2-Hexanone	1.6	U	1.6	8.0	ug/kg	123	118	45-155	4	30
Isopropylbenzene	0.06	U	0.06	4.0	ug/kg	106	105	76-120	1	30
p-Isopropyltoluene	0.11	U	0.11	4.0	ug/kg	101	102	75-120	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methyl Tertiary Butyl Ether	0.21	U	0.21	4.0	ug/kg	103	99	74-121	4	30
4-Methyl-2-pentanone	0.39	U	0.39	8.0	ug/kg	107	101	61-134	5	30
Methylene Chloride	1.1	J	0.24	4.0	ug/kg	110	103	76-124	6	30
n-Propylbenzene	0.07	U	0.07	4.0	ug/kg	108	107	77-120	1	30
Styrene	0.10	U	0.10	4.0	ug/kg	104	102	76-120	2	30
1,1,1,2-Tetrachloroethane	0.11	U	0.11	4.0	ug/kg	101	99	80-120	2	30
1,1,2,2-Tetrachloroethane	0.23	U	0.23	4.0	ug/kg	98	94	71-123	4	30
Tetrachloroethene	0.20	U	0.20	4.0	ug/kg	103	99	77-120	3	30
Toluene	0.08	U	0.08	4.0	ug/kg	103	102	80-120	1	30
1,2,3-Trichlorobenzene	0.14	U	0.14	4.0	ug/kg	92	94	64-120	2	30
1,2,4-Trichlorobenzene	0.18	U	0.18	4.0	ug/kg	87	90	68-120	3	30
1,1,1-Trichloroethane	0.20	U	0.20	4.0	ug/kg	102	99	71-125	3	30
1,1,2-Trichloroethane	0.27	U	0.27	4.0	ug/kg	101	98	80-120	3	30
Trichloroethene	0.15	U	0.15	4.0	ug/kg	101	99	80-120	3	30
Trichlorofluoromethane	0.29	U	0.29	4.0	ug/kg	89	83	58-133	7	30
1,2,3-Trichloropropane	0.33	U	0.33	4.0	ug/kg	97	95	71-123	3	30
1,2,4-Trimethylbenzene	0.40	U	0.40	4.0	ug/kg	102	102	79-120	0	30
1,3,5-Trimethylbenzene	0.10	U	0.10	4.0	ug/kg	104	103	78-120	1	30
Vinyl Chloride	0.20	U	0.20	4.0	ug/kg	81	79	53-120	2	30
m+p-Xylene	0.17	U	0.17	4.0	ug/kg	106	105	80-120	2	30
o-Xylene	0.17	U	0.17	4.0	ug/kg	103	103	80-120	1	30
Batch number: E111461AA	Sample number(s): 6296041									
1,4-Dioxane	0.5	U	0.5	2.0	ug/l	97	106	80-123	9	30
Batch number: E111462AA	Sample number(s): 6296035-6296037,6296039									
1,4-Dioxane	5.0	U	5.0	15	ug/kg	104	104	70-130	0	30
Batch number: L111471AA	Sample number(s): 6296041									
Acetone	6	U	6.	20	ug/l	134	111	49-234	19	30
Benzene	0.5	U	0.5	5	ug/l	97	98	79-120	1	30
Bromobenzene	1	U	1.	5	ug/l	92	93	80-120	1	30
Bromochloromethane	1	U	1.	5	ug/l	95	94	80-120	1	30
Bromodichloromethane	1	U	1.	5	ug/l	90	91	80-120	1	30
Bromoform	1	U	1.	5	ug/l	78	80	61-120	2	30
Bromomethane	1	U	1.	5	ug/l	102	103	44-120	1	30
2-Butanone	3	U	3.	10	ug/l	105	97	66-151	8	30
n-Butylbenzene	1	U	1.	5	ug/l	96	97	74-120	1	30
sec-Butylbenzene	1	U	1.	5	ug/l	91	94	78-120	4	30
tert-Butylbenzene	1	U	1.	5	ug/l	91	93	80-120	2	30
Carbon Tetrachloride	1	U	1.	5	ug/l	89	89	75-123	0	30
Chlorobenzene	0.8	U	0.8	5	ug/l	92	93	80-120	2	30
Chloroethane	1	U	1.	5	ug/l	103	103	49-129	0	30
2-Chloroethyl Vinyl Ether	2	U	2.	10	ug/l	92	93	56-129	1	30
Chloroform	0.8	U	0.8	5	ug/l	96	97	77-122	2	30
Chloromethane	1	U	1.	5	ug/l	99	100	60-129	1	30
2-Chlorotoluene	1	U	1.	5	ug/l	93	94	80-120	1	30
4-Chlorotoluene	1	U	1.	5	ug/l	94	97	80-120	3	30
Chlorotrifluoroethene	2	U	2.	5	ug/l	92	91	38-136	1	30
1,2-Dibromo-3-chloropropane	2	U	2.	5	ug/l	86	87	56-126	1	30
Dibromochloromethane	1	U	1.	5	ug/l	87	87	80-120	0	30
1,2-Dibromoethane	1	U	1.	5	ug/l	94	95	80-120	1	30
Dibromomethane	1	U	1.	5	ug/l	90	90	80-120	1	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	93	94	80-120	1	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	93	94	80-120	1	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	94	95	80-120	1	30
Dichlorodifluoromethane	2	U	2.	5	ug/l	81	83	47-120	3	30
1,1-Dichloroethane	1	U	1.	5	ug/l	95	96	79-120	2	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloroethane	1	U	1.	5	ug/l	97	96	70-130	2	30
1,1-Dichloroethene	0.8	U	0.8	5	ug/l	90	90	74-123	0	30
cis-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	93	94	80-120	2	30
trans-1,2-Dichloroethene	0.8	U	0.8	5	ug/l	92	95	80-120	3	30
1,2-Dichloropropane	1	U	1.	5	ug/l	95	95	78-120	0	30
1,3-Dichloropropane	1	U	1.	5	ug/l	95	97	80-120	2	30
2,2-Dichloropropane	1	U	1.	5	ug/l	88	89	77-124	1	30
1,1-Dichloropropene	1	U	1.	5	ug/l	91	93	80-120	2	30
cis-1,3-Dichloropropene	1	U	1.	5	ug/l	91	91	80-120	0	30
trans-1,3-Dichloropropene	1	U	1.	5	ug/l	87	91	79-120	5	30
Ethylbenzene	0.8	U	0.8	5	ug/l	94	96	79-120	2	30
Freon 113	2	U	2.	10	ug/l	88	90	69-128	3	30
Freon 133a	2	U	2.	5	ug/l	105	101	77-120	5	30
Hexachlorobutadiene	2	U	2.	5	ug/l	81	84	58-120	4	30
2-Hexanone	3	U	3.	10	ug/l	93	92	65-136	2	30
Isopropylbenzene	1	U	1.	5	ug/l	94	96	77-120	2	30
p-Isopropyltoluene	1	U	1.	5	ug/l	91	91	80-120	1	30
Methyl Tertiary Butyl Ether	0.5	U	0.5	5	ug/l	92	92	76-120	0	30
4-Methyl-2-pentanone	3	U	3.	10	ug/l	90	90	70-121	0	30
Methylene Chloride	2	U	2.	5	ug/l	95	96	80-120	2	30
n-Propylbenzene	1	U	1.	5	ug/l	95	93	80-120	3	30
Styrene	1	U	1.	5	ug/l	91	94	80-120	3	30
1,1,1,2-Tetrachloroethane	1	U	1.	5	ug/l	89	92	80-120	3	30
1,1,2,2-Tetrachloroethane	1	U	1.	5	ug/l	100	99	71-120	1	30
Tetrachloroethene	0.8	U	0.8	5	ug/l	90	91	80-121	1	30
Toluene	0.7	U	0.7	5	ug/l	95	96	79-120	2	30
1,2,3-Trichlorobenzene	1	U	1.	5	ug/l	87	89	65-120	2	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	82	84	67-120	2	30
1,1,1-Trichloroethane	0.8	U	0.8	5	ug/l	95	94	75-127	1	30
1,1,2-Trichloroethane	0.8	U	0.8	5	ug/l	95	95	80-120	0	30
Trichloroethene	1	U	1.	5	ug/l	92	92	80-120	0	30
Trichlorofluoromethane	2	U	2.	5	ug/l	100	101	64-129	2	30
1,2,3-Trichloropropane	1	U	1.	5	ug/l	93	95	80-120	2	30
1,2,4-Trimethylbenzene	1	U	1.	5	ug/l	94	96	74-120	2	30
1,3,5-Trimethylbenzene	1	U	1.	5	ug/l	93	94	75-120	0	30
Vinyl Chloride	1	U	1.	5	ug/l	97	99	65-125	2	30
m+p-Xylene	0.8	U	0.8	5	ug/l	93	95	80-120	2	30
o-Xylene	0.8	U	0.8	5	ug/l	92	93	80-120	1	30
Batch number: 11144WAA026	Sample number(s): 6296055									
N-Nitrosodimethylamine	0.500	U	0.500	1.00	ng/l	104	96	70-130	8	30
Batch number: 11144WAK026	Sample number(s): 6296055									
Acenaphthene	0.010	U	0.010	0.050	ug/l	96	99	74-109	4	30
Acenaphthylene	0.010	U	0.010	0.050	ug/l	98	103	70-110	6	30
Anthracene	0.010	U	0.010	0.050	ug/l	102	104	66-111	2	30
Benzo(a)anthracene	0.010	U	0.010	0.050	ug/l	103	105	72-114	2	30
Benzo(a)pyrene	0.010	U	0.010	0.050	ug/l	142*	146*	60-127	3	30
Benzo(b)fluoranthene	0.010	U	0.010	0.050	ug/l	145*	148*	69-123	2	30
Benzo(g,h,i)perylene	0.010	U	0.010	0.050	ug/l	147*	152*	57-131	4	30
Benzo(k)fluoranthene	0.010	U	0.010	0.050	ug/l	143*	147*	59-130	3	30
Butylbenzylphthalate	0.070	J	0.050	1.0	ug/l	105	109	40-138	4	30
Di-n-butylphthalate	0.082	J	0.050	1.0	ug/l	102	105	74-131	3	30
Chrysene	0.010	U	0.010	0.050	ug/l	101	103	76-116	2	30
Dibenz(a,h)anthracene	0.010	U	0.010	0.050	ug/l	147*	153*	55-134	4	30
Diethylphthalate	0.050	U	0.050	1.0	ug/l	98	102	57-134	4	30
Dimethylphthalate	0.050	U	0.050	1.0	ug/l	97	103	40-119	6	30
Bis(2-Ethylhexyl)phthalate	0.11	J	0.050	1.0	ug/l	121	124	57-154	2	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Fluoranthene	0.010	U	0.010	0.050	ug/l	102	104	75-116	2	30
Fluorene	0.010	U	0.010	0.050	ug/l	102	107	75-114	5	30
Indeno(1,2,3-cd)pyrene	0.010	U	0.010	0.050	ug/l	147*	152*	69-124	3	30
1-Methylnaphthalene	0.010	U	0.010	0.050	ug/l	101	96	71-117	5	30
2-Methylnaphthalene	0.010	U	0.010	0.050	ug/l	90	85	75-115	5	30
Naphthalene	0.030	U	0.030	0.050	ug/l	97	96	72-109	1	30
N-Nitrosodimethylamine	0.010	U	0.010	0.050	ug/l	63	69	36-89	9	30
Di-n-octylphthalate	0.050	U	0.050	1.0	ug/l	144	152*	57-145	6	30
Phenanthrene	0.010	U	0.010	0.050	ug/l	97	99	76-111	2	30
Pyrene	0.010	U	0.010	0.050	ug/l	96	98	69-118	2	30
Batch number: 11145SLD026	Sample number(s): 6296035-6296040,6296042-6296049,6296051-6296054,6296056									
Acenaphthene	17	U	17.	170	ug/kg	81		76-111		
Acenaphthylene	17	U	17.	170	ug/kg	85		75-122		
Aniline	170 U		170.	500	ug/kg	63		34-94		
Anthracene	17	U	17.	170	ug/kg	84		76-112		
Benzidine	1,200 U		1,200.	3,300	ug/kg	38		15-121		
Benzo(a)anthracene	17	U	17.	170	ug/kg	85		73-112		
Benzo(a)pyrene	17	U	17.	170	ug/kg	87		69-122		
Benzo(b)fluoranthene	17	U	17.	170	ug/kg	87		61-127		
Benzo(g,h,i)perylene	17	U	17.	170	ug/kg	82		65-122		
Benzo(k)fluoranthene	17	U	17.	170	ug/kg	83		67-125		
Benzoic acid	170 U		170.	500	ug/kg	104		62-113		
Benzyl alcohol	170 U		170.	500	ug/kg	96		68-111		
4-Bromophenyl-phenylether	17	U	17.	170	ug/kg	75*		79-117		
Butylbenzylphthalate	17	U	17.	170	ug/kg	91		75-115		
Di-n-butylphthalate	17	U	17.	170	ug/kg	84		79-112		
Carbazole	17	U	17.	170	ug/kg	89		77-113		
4-Chloro-3-methylphenol	33	U	33.	170	ug/kg	97		74-119		
4-Chloroaniline	67	U	67.	170	ug/kg	51		10-110		
bis(2-Chloroethoxy)methane	17	U	17.	170	ug/kg	78		70-118		
bis(2-Chloroethyl)ether	17	U	17.	170	ug/kg	82		70-104		
bis(2-Chloroisopropyl)ether	17	U	17.	170	ug/kg	82		68-131		
2-Chloronaphthalene	17	U	17.	170	ug/kg	70		49-128		
2-Chlorophenol	17	U	17.	170	ug/kg	93		72-112		
4-Chlorophenyl-phenylether	33	U	33.	170	ug/kg	84		79-110		
Chrysene	17	U	17.	170	ug/kg	85		76-113		
Dibenz(a,h)anthracene	17	U	17.	170	ug/kg	82		70-128		
Dibenzofuran	17	U	17.	170	ug/kg	86		79-108		
1,2-Dichlorobenzene	17	U	17.	170	ug/kg	80		79-102		
1,3-Dichlorobenzene	17	U	17.	170	ug/kg	77		70-98		
1,4-Dichlorobenzene	17	U	17.	170	ug/kg	78		74-106		
3,3'-Dichlorobenzidine	100 U		100.	330	ug/kg	55		24-101		
2,4-Dichlorophenol	17	U	17.	170	ug/kg	88		75-111		
Diethylphthalate	17	U	17.	170	ug/kg	89		76-111		
2,4-Dimethylphenol	33	U	33.	170	ug/kg	85		72-111		
3,5-Dimethylphenol	33	U	33.	170	ug/kg	94		70-130		
Dimethylphthalate	17	U	17.	170	ug/kg	85		77-109		
4,6-Dinitro-2-methylphenol	170 U		170.	500	ug/kg	80		53-110		
2,4-Dinitrophenol	330 U		330.	1,000	ug/kg	88		37-120		
2,4-Dinitrotoluene	33	U	33.	170	ug/kg	97		73-115		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,6-Dinitrotoluene	17	U	17.	170	ug/kg	88		79-115		
1,2-Diphenylhydrazine	17	U	17.	170	ug/kg	77		77-111		
bis(2-Ethylhexyl)phthalate	17	U	17.	330	ug/kg	90		75-117		
Fluoranthene	17	U	17.	170	ug/kg	89		78-116		
Fluorene	17	U	17.	170	ug/kg	87		75-116		
Hexachlorobenzene	17	U	17.	170	ug/kg	75*		78-116		
Hexachlorobutadiene	67	U	67.	170	ug/kg	66*		70-112		
Hexachlorocyclopentadiene	170	U	170.	500	ug/kg	70		46-115		
Hexachloroethane	17	U	17.	170	ug/kg	76		68-105		
Indeno(1,2,3-cd)pyrene	17	U	17.	170	ug/kg	86		64-119		
Isophorone	17	U	17.	170	ug/kg	82		69-110		
1-Methylnaphthalene	17	U	17.	170	ug/kg	84		74-105		
2-Methylnaphthalene	17	U	17.	170	ug/kg	81		76-105		
2-Methylphenol	33	U	33.	170	ug/kg	93		66-110		
4-Methylphenol	33	U	33.	170	ug/kg	98		66-117		
Naphthalene	17	U	17.	170	ug/kg	79		73-106		
2-Nitroaniline	17	U	17.	170	ug/kg	95		78-116		
3-Nitroaniline	33	U	33.	170	ug/kg	88		62-109		
4-Nitroaniline	67	U	67.	170	ug/kg	76		49-98		
Nitrobenzene	17	U	17.	170	ug/kg	79		71-104		
2-Nitrophenol	17	U	17.	170	ug/kg	80*		81-114		
4-Nitrophenol	170	U	170.	500	ug/kg	90		56-118		
N-Nitroso-di-n-propylamine	17	U	17.	170	ug/kg	88		63-107		
N-Nitrosodimethylamine	33	U	33.	170	ug/kg	76		60-106		
N-Nitrosodiphenylamine	17	U	17.	170	ug/kg	81		67-141		
Di-n-octylphthalate	17	U	17.	170	ug/kg	87		68-130		
Pentachlorophenol	170	U	170.	500	ug/kg	77		51-117		
Phenanthrene	17	U	17.	170	ug/kg	81		77-113		
Phenol	17	U	17.	170	ug/kg	97		58-112		
Pyrene	17	U	17.	170	ug/kg	87		75-115		
1,2,4-Trichlorobenzene	17	U	17.	170	ug/kg	74		73-108		
2,4,5-Trichlorophenol	33	U	33.	170	ug/kg	87		76-107		
2,4,6-Trichlorophenol	33	U	33.	170	ug/kg	84		78-111		

Batch number: 11145SLF026 Sample number(s): 6296035-6296040,6296042-6296049,6296051-6296054,6296056

Acenaphthene	0.67	U	0.67	1.7	ug/kg	94		63-120		
Acenaphthylene	0.33	U	0.33	1.7	ug/kg	86		60-120		
Anthracene	0.33	U	0.33	1.7	ug/kg	94		55-120		
Benzo(a)anthracene	0.67	U	0.67	1.7	ug/kg	100		74-120		
Benzo(a)pyrene	0.67	U	0.67	1.7	ug/kg	119		58-129		
Benzo(b)fluoranthene	0.67	U	0.67	1.7	ug/kg	129		63-143		
Benzo(g,h,i)perylene	0.67	U	0.67	1.7	ug/kg	122		44-138		
Benzo(k)fluoranthene	0.67	U	0.67	1.7	ug/kg	132		54-142		
Butylbenzylphthalate	6.0	U	6.0	18	ug/kg	102		65-131		
Di-n-butylphthalate	6.0	U	6.0	18	ug/kg	109		75-137		
Chrysene	0.33	U	0.33	1.7	ug/kg	103		73-114		
Dibenz(a,h)anthracene	0.67	U	0.67	1.7	ug/kg	123		53-138		
Diethylphthalate	6.0	U	6.0	18	ug/kg	103		68-125		
Dimethylphthalate	6.0	U	6.0	18	ug/kg	101		79-121		
Bis(2-Ethylhexyl)phthalate	6.0	U	6.0	18	ug/kg	110		67-143		
Fluoranthene	0.67	U	0.67	1.7	ug/kg	103		64-120		
Fluorene	0.67	U	0.67	1.7	ug/kg	99		71-120		
Indeno(1,2,3-cd)pyrene	0.67	U	0.67	1.7	ug/kg	123		56-134		
1-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	93		72-120		
2-Methylnaphthalene	0.67	U	0.67	1.7	ug/kg	83		62-120		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Naphthalene	0.67	U	0.67	1.7	ug/kg	88		67-120		
N-Nitrosodimethylamine	0.67	U	0.67	1.7	ug/kg	82		55-118		
Di-n-octylphthalate	6.0	U	6.0	18	ug/kg	134		55-176		
Phenanthrene	0.67	U	0.67	1.7	ug/kg	99		75-120		
Pyrene	0.67	U	0.67	1.7	ug/kg	100		56-121		
Batch number: 11146SLE026	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054									
N-Nitrosodimethylamine	16.7	U	16.7	33.3	ng/kg	83		70-130		
Batch number: 11146WAD026	Sample number(s): 6296055									
Aniline	1	U	1.	5	ug/l	71	76	49-101	6	30
Benzidine	20	U	20.	60	ug/l	68	74	34-117	9	30
Benzoic acid	6	U	6.	15	ug/l	44	26	10-69	51*	30
Benzyl alcohol	5	U	5.	15	ug/l	81	79	66-97	2	30
4-Bromophenyl-phenylether	1	U	1.	5	ug/l	91	92	82-117	0	30
Carbazole	1	U	1.	5	ug/l	96	94	81-114	2	30
4-Chloro-3-methylphenol	1	U	1.	5	ug/l	96	91	70-123	5	30
4-Chloroaniline	1	U	1.	5	ug/l	70	80	42-124	13	30
bis(2-Chloroethoxy)methane	1	U	1.	5	ug/l	92	93	74-124	1	30
bis(2-Chloroethyl)ether	1	U	1.	5	ug/l	91	89	77-108	2	30
bis(2-Chloroisopropyl)ether	1	U	1.	5	ug/l	91	90	62-127	1	30
2-Chloronaphthalene	2	U	2.	5	ug/l	95	97	54-132	2	30
2-Chlorophenol	1	U	1.	5	ug/l	97	92	77-108	6	30
4-Chlorophenyl-phenylether	2	U	2.	5	ug/l	93	92	82-111	1	30
Dibenzofuran	1	U	1.	5	ug/l	94	93	83-108	1	30
1,2-Dichlorobenzene	1	U	1.	5	ug/l	86	84	55-118	2	30
1,3-Dichlorobenzene	1	U	1.	5	ug/l	86	85	50-119	1	30
1,4-Dichlorobenzene	1	U	1.	5	ug/l	86	84	53-119	2	30
3,3'-Dichlorobenzidine	2	U	2.	5	ug/l	67	74	49-111	10	30
2,4-Dichlorophenol	1	U	1.	5	ug/l	95	90	80-109	5	30
2,4-Dimethylphenol	3	U	3.	10	ug/l	96	92	72-110	4	30
3,5-Dimethylphenol	3	U	3.	10	ug/l	104	99	70-130	4	30
4,6-Dinitro-2-methylphenol	5	U	5.	15	ug/l	100	93	78-119	8	30
2,4-Dinitrophenol	10	U	10.	30	ug/l	100	84	52-131	18	30
2,4-Dinitrotoluene	1	U	1.	5	ug/l	98	96	81-115	2	30
2,6-Dinitrotoluene	1	U	1.	5	ug/l	96	94	85-115	3	30
1,2-Diphenylhydrazine	1	U	1.	5	ug/l	99	96	78-116	3	30
Hexachlorobenzene	1	U	1.	5	ug/l	94	92	81-118	2	30
Hexachlorobutadiene	1	U	1.	5	ug/l	90	88	57-124	2	30
Hexachlorocyclopentadiene	5	U	5.	15	ug/l	77	76	36-118	1	30
Hexachloroethane	1	U	1.	5	ug/l	82	81	52-113	1	30
Isophorone	1	U	1.	5	ug/l	94	94	74-117	0	30
2-Methylphenol	1	U	1.	5	ug/l	84	82	64-101	3	30
4-Methylphenol	2	U	2.	5	ug/l	78	76	61-103	2	30
2-Nitroaniline	1	U	1.	5	ug/l	99	96	83-116	3	30
3-Nitroaniline	1	U	1.	5	ug/l	95	91	74-113	4	30
4-Nitroaniline	1	U	1.	5	ug/l	78	79	59-100	1	30
Nitrobenzene	1	U	1.	5	ug/l	92	92	75-109	0	30
2-Nitrophenol	1	U	1.	5	ug/l	93	93	86-120	0	30
4-Nitrophenol	10	U	10.	30	ug/l	47	46	16-78	2	30
N-Nitroso-di-n-propylamine	1	U	1.	5	ug/l	91	90	69-110	1	30
N-Nitrosodiphenylamine	2	U	2.	5	ug/l	94	92	67-136	2	30
Pentachlorophenol	3	U	3.	15	ug/l	98	90	53-110	8	30
Phenol	1	U	1.	5	ug/l	41	39	21-67	5	30
1,2,4-Trichlorobenzene	1	U	1.	5	ug/l	88	87	71-112	2	30
2,4,5-Trichlorophenol	1	U	1.	5	ug/l	98	93	79-107	6	30
2,4,6-Trichlorophenol	1	U	1.	5	ug/l	96	94	81-113	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 11151A20A	Sample number(s): 6296041									
TPH-GRO S.CA water C5-C12	20	U	20.	50	ug/l	109	109	75-135	0	30
Batch number: 11151B34A	Sample number(s): 6296036									
9a TPH by EPA 8015B Gas C5-C12	0.2	U	0.2	1.0	mg/kg	68	74	67-119	8	30
Batch number: 111510006A	Sample number(s): 6296035-6296038,6296042-6296043,6296045-6296049,6296051,6296054									
4-Amino-2,6-Dinitrotoluene	60	U	60.	120	ug/kg	112		80-120		
2-Amino-4,6-Dinitrotoluene	40	U	40.	120	ug/kg	110		80-120		
2,6-Diamino-4-nitrotoluene	80	U	80.	240	ug/kg	100	96	54-134	3	30
2,4-Diamino-6-nitrotoluene	80	U	80.	240	ug/kg	99	96	54-134	3	30
1,3-Dinitrobenzene	40	U	40.	120	ug/kg	113		51-171		
2,4-Dinitrotoluene	40	U	40.	120	ug/kg	106		72-135		
2,6-Dinitrotoluene	40	U	40.	120	ug/kg	110		80-120		
HMX	100 U		100.	300	ug/kg	97		74-130		
Nitrobenzene	40	U	40.	120	ug/kg	110		80-120		
Nitroglycerin	800 U		800.	2,400	ug/kg	86		80-120		
2-Nitrotoluene	80	U	80.	120	ug/kg	107		78-128		
3-Nitrotoluene	100 U		100.	120	ug/kg	113		73-127		
4-Nitrotoluene	80	U	80.	120	ug/kg	106		80-120		
PETN	800 U		800.	2,400	ug/kg	116		80-120		
RDX	50	U	50.	120	ug/kg	100		75-131		
Tetryl	61	U	61.	120	ug/kg	104		70-168		
1,3,5-Trinitrobenzene	40	U	40.	120	ug/kg	107		77-137		
2,4,6-Trinitrotoluene	40	U	40.	120	ug/kg	111		80-120		
Batch number: 111580002A	Sample number(s): 6296055									
4-Amino-2,6-Dinitrotoluene	0.30	U	0.30	0.60	ug/l	110	110	80-120	0	30
2-Amino-4,6-Dinitrotoluene	0.20	U	0.20	0.60	ug/l	100	110	80-120	10	30
2,6-Diamino-4-nitrotoluene	0.20	U	0.20	0.60	ug/l	100	103	50-122	3	30
2,4-Diamino-6-nitrotoluene	0.20	U	0.20	0.60	ug/l	100	103	50-122	3	30
1,3-Dinitrobenzene	0.20	U	0.20	0.60	ug/l	110	110	72-117	0	30
2,4-Dinitrotoluene	0.20	U	0.20	0.60	ug/l	100	100	80-120	0	30
2,6-Dinitrotoluene	0.20	U	0.20	0.60	ug/l	110	110	80-120	0	30
HMX	0.65	U	0.65	2.0	ug/l	100	100	65-125	0	30
Nitrobenzene	0.20	U	0.20	0.60	ug/l	100	100	75-121	0	30
Nitroglycerin	5.2	U	5.2	15	ug/l	92	92	80-120	0	30
2-Nitrotoluene	0.20	U	0.20	0.60	ug/l	100	100	74-120	0	30
3-Nitrotoluene	0.40	U	0.40	1.2	ug/l	110*	110*	69-107	0	30
4-Nitrotoluene	0.60	U	0.60	1.2	ug/l	100	100	80-120	0	30
PETN	6.0	U	6.0	18	ug/l	117	117	80-120	0	30
RDX	0.20	U	0.20	0.60	ug/l	97	96	70-125	1	30
Tetryl	0.40	U	0.40	0.60	ug/l	100	99	72-141	1	30
1,3,5-Trinitrobenzene	0.20	U	0.20	0.60	ug/l	99	96	53-129	3	30
2,4,6-Trinitrotoluene	0.20	U	0.20	0.60	ug/l	100	100	76-109	0	30
Batch number: 111440027A	Sample number(s): 6296055									
25b Formaldehyde 8315A	10	U	10.	50	ug/l	62*	68*	69-130	9	30
Batch number: 111450003A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054									
25a Formaldehyde 8315A	600 U		600.	1,500	ug/kg	76*		80-126		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 111450014A	Sample number(s): 6296055									
2,4-D	0.16	U	0.16	0.50	ug/l	120	116	73-157	3	30
Dalapon	0.25	U	0.25	1.3	ug/l	63	70	40-100	10	30
2,4-DB	0.30	U	0.30	1.0	ug/l	116	112	65-130	4	30
Dicamba	0.080	U	0.080	0.30	ug/l	96	92	68-135	4	30
Dinoseb	0.10	U	0.10	0.50	ug/l	74	74	32-91	0	30
2,4-DP (Dichlorprop)	0.16	U	0.16	0.50	ug/l	124	120	76-170	3	30
MCPA	300 U		300.	1,000	ug/l	90	88	65-128	2	30
MCPP	50	U	50.	200	ug/l	96	96	67-137	0	30
2,4,5-T	0.015	U	0.015	0.050	ug/l	112	108	63-147	4	30
2,4,5-TP	0.010	U	0.010	0.050	ug/l	104	108	63-134	4	30
Batch number: 111450020A	Sample number(s): 6296042-6296049,6296051-6296054,6296056									
2,4-D	1.2	U	1.2	3.6	ug/kg	95		73-146		
Dalapon	4.4	U	4.4	9.0	ug/kg	49		11-116		
2,4-DB	0.62	U	0.62	1.7	ug/kg	100		62-131		
Dicamba	0.40	U	0.40	1.2	ug/kg	78		54-121		
Dinoseb	0.80	U	0.80	2.4	ug/kg	8*		10-36		
2,4-DP (Dichlorprop)	0.80	U	0.80	1.7	ug/kg	103		62-170		
MCPA	76	U	76.	250	ug/kg	71		60-130		
MCPP (Mecoprop)	75	U	75.	250	ug/kg	101		54-137		
2,4,5-T	0.082	U	0.082	0.17	ug/kg	90		73-143		
2,4,5-TP	0.075	U	0.075	0.17	ug/kg	83		68-114		
Batch number: 111520014A	Sample number(s): 6296036,6296039-6296040,6296042,6296054									
6a Perchlorate EPA 6850	2.1	U	2.1	5.0	ug/kg	104		85-115		
Batch number: 111460034A	Sample number(s): 6296035-6296040,6296042-6296049,6296051-6296054,6296056									
Aroclor 5432	1.0	U	1.0	3.3	ug/kg					
Aroclor 5442	1.0	U	1.0	3.3	ug/kg	81		36-106		
Aroclor 5460	1.0	U	1.0	3.3	ug/kg					
PCB-1016	0.33	U	0.33	1.7	ug/kg	98		72-120		
PCB-1221	0.33	U	0.33	1.7	ug/kg					
PCB-1232	0.33	U	0.33	1.7	ug/kg					
PCB-1242	0.33	U	0.33	1.7	ug/kg					
PCB-1248	0.33	U	0.33	1.7	ug/kg					
PCB-1254	0.33	U	0.33	1.7	ug/kg					
PCB-1260	0.39	U	0.39	1.7	ug/kg	103		65-137		
PCB-1262	0.33	U	0.33	1.7	ug/kg					
PCB-1268	0.33	U	0.33	1.7	ug/kg					
Batch number: 111460040A	Sample number(s): 6296055									
Aldrin	0.0020	U	0.0020	0.010	ug/l	101	111	54-159	10	30
Alpha BHC	0.0030	U	0.0030	0.010	ug/l	110	110	59-146	0	30
Beta BHC	0.0029	U	0.0029	0.010	ug/l	103	103	73-147	0	30
Gamma BHC - Lindane	0.0020	U	0.0020	0.010	ug/l	110	110	68-128	0	30
Chlordane	0.12	U	0.12	0.50	ug/l					
p,p-DDD	0.0050	U	0.0050	0.020	ug/l	120	120	71-139	0	30
p,p-DDE	0.0050	U	0.0050	0.020	ug/l	111	116	66-130	5	30
p,p-DDT	0.0050	U	0.0050	0.020	ug/l	114	114	53-126	0	30
Delta BHC	0.0029	U	0.0029	0.010	ug/l	113	113	76-148	0	30
Dieldrin	0.0053	U	0.0053	0.020	ug/l	125	125	76-132	0	30
Endosulfan I	0.0043	U	0.0043	0.010	ug/l	120	120	68-128	0	30
Endosulfan II	0.59		0.015	0.020	ug/l	110	110	59-144	0	30
Endosulfan Sulfate	0.0058	U	0.0058	0.020	ug/l	110	115	71-142	4	30
Endrin	0.0081	U	0.0081	0.020	ug/l	85	105	52-132	21	30
Endrin Aldehyde	0.020	U	0.020	0.10	ug/l	115	115	68-139	0	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Endrin Ketone	0.0050	U	0.0050	0.020	ug/l	130	125	69-146	4	30
Heptachlor	0.0026	U	0.0026	0.010	ug/l	120	130*	57-126	8	30
Heptachlor Epoxide	0.0023	U	0.0023	0.010	ug/l	102	112	73-156	10	30
Methoxychlor	0.030	U	0.030	0.10	ug/l	120	120	52-133	0	30
Mirex	0.085	U	0.085	0.25	ug/l					
Toxaphene	1.0	U	1.0	3.0	ug/l					
Batch number: 111460041A	Sample number(s): 6296055									
Aroclor 5432	0.10	U	0.10	0.50	ug/l					
Aroclor 5442	0.10	U	0.10	0.50	ug/l	72	84	35-84	15	30
Aroclor 5460	0.10	U	0.10	0.50	ug/l					
PCB-1016	0.10	U	0.10	0.50	ug/l	104	100	51-128	4	30
PCB-1221	0.10	U	0.10	0.50	ug/l					
PCB-1232	0.20	U	0.20	0.50	ug/l					
PCB-1242	0.10	U	0.10	0.50	ug/l					
PCB-1248	0.10	U	0.10	0.50	ug/l					
PCB-1254	0.10	U	0.10	0.50	ug/l					
PCB-1260	0.15	U	0.15	0.50	ug/l	96	102	56-135	6	30
PCB-1262	0.20	U	0.20	0.50	ug/l					
PCB-1268	0.16	U	0.16	0.50	ug/l					
Batch number: 111470004A	Sample number(s): 6296042-6296049,6296051-6296054,6296056									
Aldrin	0.066	U	0.066	0.17	ug/kg	79		44-135		
Alpha BHC	0.034	U	0.034	0.17	ug/kg	112		38-130		
Beta BHC	0.060	U	0.060	0.17	ug/kg	91		56-134		
Gamma BHC - Lindane	0.034	U	0.034	0.17	ug/kg	115		46-127		
Chlordane	0.80	U	0.80	3.4	ug/kg					
p,p-DDD	0.066	U	0.066	0.34	ug/kg	131		60-137		
p,p-DDE	0.066	U	0.066	0.34	ug/kg	95		59-141		
p,p-DDT	0.066	U	0.066	0.34	ug/kg	119		54-130		
Delta BHC	0.036	U	0.036	0.17	ug/kg	97		55-144		
Dieldrin	0.066	U	0.066	0.34	ug/kg	104		65-129		
Endosulfan I	0.044	U	0.044	0.17	ug/kg	100		45-123		
Endosulfan II	0.066	U	0.066	0.34	ug/kg	97		63-127		
Endosulfan Sulfate	0.066	U	0.066	0.34	ug/kg	112		72-138		
Endrin	0.066	U	0.066	0.34	ug/kg	110		62-129		
Endrin Aldehyde	0.066	U	0.066	0.34	ug/kg	94		55-132		
Endrin Ketone	0.066	U	0.066	0.34	ug/kg	98		69-139		
Heptachlor	0.060	U	0.060	0.17	ug/kg	100		43-124		
Heptachlor Epoxide	0.034	U	0.034	0.17	ug/kg	94		65-131		
Methoxychlor	0.34	U	0.34	1.7	ug/kg	126*		59-125		
Mirex	0.066	U	0.066	0.34	ug/kg					
Toxaphene	2.2	U	2.2	6.6	ug/kg					
Batch number: 111450001A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054									
Diethylene glycol	5.0	U	5.0	10	mg/kg	90		75-125		
Ethylene glycol	5.0	U	5.0	10	mg/kg	92		65-122		
Propylene glycol	5.0	U	5.0	10	mg/kg	90		75-125		
Batch number: 111450035A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054									
Ethanol	100	U	100.	500	ug/kg	91		71-129		
Isopropanol	100	U	100.	500	ug/kg	92		75-125		
Methanol	100	U	100.	500	ug/kg	94		68-129		
Batch number: 111450009A	Sample number(s): 6296055									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
m-Terphenyl	0.080	U	0.080	0.25	mg/l	79	79	75-125	0	20
o-Terphenyl	0.080	U	0.080	0.25	mg/l	94	91	75-125	3	20
p-Terphenyl	0.080	U	0.080	0.25	mg/l	88	86	75-125	2	20
Batch number: 111450031A	Sample number(s): 6296055									
EFH (C12-C14)	0.10	U	0.10	0.60	mg/l	100	92	69-125	8	30
EFH (C15-C20)	0.10	U	0.10	0.60	mg/l	104	96	77-125	8	30
EFH (C21-C30)	0.10	U	0.10	0.60	mg/l	100	92	68-124	8	30
EFH (C30 - C40)	0.10	U	0.10	0.60	mg/l	93	93	80-121	0	30
EFH (C8-C11)	0.10	U	0.10	0.60	mg/l	78	72	46-103	8	30
Batch number: 111480002A	Sample number(s): 6296042-6296043,6296045-6296049,6296051,6296054									
EFH (C12-C14)	0.40	U	0.40	1.2	mg/kg	96		71-118		
EFH (C15-C20)	0.40	U	0.40	1.2	mg/kg	100		76-122		
EFH (C21-C30)	0.40	U	0.40	1.2	mg/kg	100		69-132		
EFH (C30 - C40)	0.76	J	0.40	1.2	mg/kg	95		67-127		
EFH (C8-C11)	0.40	U	0.40	1.2	mg/kg	73		54-107		
Batch number: 111510027A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054									
m-Terphenyl	1.5	U	1.5	3.5	mg/kg	87		75-125		
o-Terphenyl	1.5	U	1.5	3.5	mg/kg	101		75-125		
p-Terphenyl	1.5	U	1.5	3.5	mg/kg	95		75-125		
Batch number: 111570011A	Sample number(s): 6296036									
EFH (C12-C14)	0.40	U	0.40	1.2	mg/kg	88		71-118		
EFH (C15-C20)	0.40	U	0.40	1.2	mg/kg	94		76-122		
EFH (C21-C30)	0.40	U	0.40	1.2	mg/kg	99		69-132		
EFH (C30 - C40)	0.40	U	0.40	1.2	mg/kg	92		67-127		
EFH (C8-C11)	0.40	J	0.40	1.2	mg/kg	70		54-107		
Batch number: 111441848008	Sample number(s): 6296055									
Aluminum	0.0834	U	0.0834	0.200	mg/l	96	97	90-112	1	20
Boron	0.0138	U	0.0138	0.0500	mg/l	92	93	89-110	1	20
Calcium	0.0702	U	0.0702	0.200	mg/l	100	100	90-112	0	20
Iron	0.0522	U	0.0522	0.200	mg/l	100	101	90-112	2	20
Lithium	0.0024	U	0.0024	0.0200	mg/l	97	97	80-120	0	20
Magnesium	0.0172	U	0.0172	0.100	mg/l	98	99	89-110	0	20
Manganese	0.00084	U	0.00084	0.0050	mg/l	100	101	90-110	1	20
Phosphorus	0.0089	U	0.0089	0.100	mg/l	97	98	80-120	1	20
Potassium	0.239	U	0.239	0.500	mg/l	97	95	85-115	3	20
Sodium	0.433	U	0.433	1.00	mg/l	96	96	87-114	0	20
Strontium	0.00089	U	0.00089	0.0050	mg/l	99	101	90-110	2	20
Tin	0.0098	U	0.0098	0.0200	mg/l	97	98	90-110	1	20
Titanium	0.0038	U	0.0038	0.0100	mg/l	99	101	90-113	1	20
Zirconium	0.0206	U	0.0206	0.0500	mg/l	101	102	80-120	1	20
Batch number: 111446050005A	Sample number(s): 6296055									
Antimony	0.00030	U	0.00030	0.0010	mg/l	101	98	87-110	3	20
Arsenic	0.00095	U	0.00095	0.0020	mg/l	101	108	86-111	7	20
Beryllium	0.00013	U	0.00013	0.00050	mg/l	110	107	90-113	3	20
Cadmium	0.00020	U	0.00020	0.00050	mg/l	104	105	90-114	1	20
Chromium	0.00060	U	0.00060	0.0020	mg/l	105	102	90-118	3	20
Cobalt	0.00010	U	0.00010	0.00050	mg/l	100	99	87-113	1	20
Copper	0.00038	U	0.00038	0.0020	mg/l	99	97	90-113	2	20
Lead	0.000052	U	0.00005 2	0.0010	mg/l	105	104	90-115	2	20
Nickel	0.00050	U	0.00050	0.0020	mg/l	104	105	90-113	1	20
Silver	0.000080		0.00008	0.00050	mg/l	102	104	90-115	2	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	U	0							
Vanadium	0.00016 U	0.00016	0.00050	mg/l	106	102	89-116	5	20
Zinc	0.0040 U	0.0040	0.0150	mg/l	105	105	90-116	0	20
Batch number: 111446050005B	Sample number(s): 6296055								
Selenium	0.00025 U	0.00025	0.0020	mg/l	98	101	85-114	3	20
Batch number: 111446050005C	Sample number(s): 6296055								
Molybdenum	0.00025 U	0.00025	0.00050	mg/l	102	103	89-115	1	20
Batch number: 111446050005D	Sample number(s): 6296055								
Barium	0.00053 U	0.00053	0.0020	mg/l	105	102	88-113	3	20
Batch number: 111465713002	Sample number(s): 6296055								
Mercury	0.000046 U	0.00004 6	0.00020	mg/l	97	97	80-120	1	20
Batch number: 111515708001	Sample number(s): 6296035-6296040,6296042-6296054,6296056								
Aluminum	5.03 U	5.03	20.0	mg/kg	104		61-110		
Boron	0.890 U	0.890	5.00	mg/kg	96		78-110		
Calcium	6.13 U	6.13	20.0	mg/kg	101		88-110		
Iron	4.71 U	4.71	20.0	mg/kg	106		61-110		
Lithium	0.22 U	0.22	2.0	mg/kg	105		80-120		
Magnesium	2.54 U	2.54	10.0	mg/kg	103		82-110		
Manganese	0.0780 U	0.0780	0.500	mg/kg	105		89-112		
Phosphorus	1.10 J	0.560	10.0	mg/kg	104		80-120		
Potassium	18.0 U	18.0	50.0	mg/kg	103		78-110		
Sodium	37.3 U	37.3	100	mg/kg	101		87-110		
Strontium	0.0620 U	0.0620	0.500	mg/kg	101		86-110		
Tin	1.58 J	1.00	10.0	mg/kg	103		90-114		
Titanium	0.380 U	0.380	1.00	mg/kg	120		80-120		
Zirconium	0.840 U	0.840	5.00	mg/kg	102		80-120		
Batch number: 111515711001	Sample number(s): 6296035-6296040,6296042-6296054,6296056								
Mercury	0.0029 U	0.0029	0.0997	mg/kg	91		88-123		
Batch number: 111536050004A	Sample number(s): 6296055								
Thallium	0.00015 U	0.00015	0.00050	mg/l	105	106	89-116	1	20
Batch number: 111541026001A	Sample number(s): 6296035-6296040,6296042-6296054,6296056								
Antimony	0.0600 U	0.0600	0.200	mg/kg	121		27-181		
Arsenic	0.0800 U	0.0800	0.400	mg/kg	102		83-113		
Beryllium	0.0160 U	0.0160	0.100	mg/kg	100		86-111		
Cadmium	0.0400 U	0.0400	0.100	mg/kg	105		82-118		
Chromium	0.120 U	0.120	0.400	mg/kg	109		80-120		
Cobalt	0.0200 U	0.0200	0.100	mg/kg	100		82-118		
Copper	0.0807 J	0.0660	0.400	mg/kg	97		83-110		
Lead	0.0104 U	0.0104	0.200	mg/kg	100		83-110		
Nickel	0.100 U	0.100	0.400	mg/kg	101		81-110		
Silver	0.0120 U	0.0120	0.100	mg/kg	102		81-111		
Thallium	0.0300 U	0.0300	0.100	mg/kg	99		83-110		
Vanadium	0.0220 U	0.0220	0.100	mg/kg	102		84-116		
Zinc	0.560 U	0.560	3.00	mg/kg	102		81-112		
Batch number: 111541026001B	Sample number(s): 6296035-6296040,6296042-6296054,6296056								
Selenium	0.0400 U	0.0400	0.400	mg/kg	102		83-111		
Batch number: 111541026001C	Sample number(s): 6296035-6296040,6296042-6296054,6296056								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Molybdenum	0.0500	U	0.0500	0.100	mg/kg	114		78-122		
Batch number: 111541026001D	Sample number(s): 6296035-6296040,6296042-6296054,6296056									
Barium	0.108	U	0.108	0.400	mg/kg	101		81-111		
Batch number: 11143495401B	Sample number(s): 6296055									
3b Cr VI by EPA 7199	5.0	U	5.0	10.0	ug/l	103	102	90-110	1	20
Batch number: 11144196901B	Sample number(s): 6296055									
11b Anions by 300.0 - Fluoride	0.080	U	0.080	0.10	mg/l	91	91	90-110	1	20
Batch number: 11146117101B	Sample number(s): 6296055									
17b Cyanide by 9012B	0.0050	U	0.0050	0.010	mg/l	103	102	90-110	2	20
Batch number: 11151102201A	Sample number(s): 6296036,6296042-6296043,6296045-6296048,6296050,6296054									
17a Cyanide by 9012B	0.18	U	0.18	0.50	mg/kg	107		80-120		
Batch number: 11151102201B	Sample number(s): 6296051									
17a Cyanide by 9012B	0.18	U	0.18	0.50	mg/kg	107		80-120		
Batch number: 11151621202A	Sample number(s): 6296035-6296040,6296042-6296045									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	98		90-110		
11a Anions by 300.0 - Nitrate	0.80	U	0.80	1.5	mg/kg	98		90-110		
Batch number: 11151621202B	Sample number(s): 6296046-6296048,6296050-6296054,6296056									
11a Anions by 300.0 - Fluoride	0.80	U	0.80	1.0	mg/kg	98		90-110		
11a Anions by 300.0 - Nitrate	0.80	U	0.80	1.5	mg/kg	98		90-110		
Batch number: 11152243201A	Sample number(s): 6296035-6296040,6296042-6296048,6296050-6296054,6296056									
3a Cr VI by EPA 7199	0.20	U	0.20	1.0	mg/kg	98		80-120		
Batch number: 11153621201A	Sample number(s): 6296035-6296040,6296042-6296045									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	96		85-115		
Batch number: 11153621201B	Sample number(s): 6296046-6296048,6296050-6296054,6296056									
7a Perchlorate EPA 314.0	9.0	U	9.0	30.0	ug/kg	96		85-115		
Batch number: 11154621701A	Sample number(s): 6296055									
7b Perchlorate EPA 314.0	0.70	U	0.70	2.0	ug/l	98	99	85-115	0	20
Batch number: 11144020001A	Sample number(s): 6296055									
18b pH by 9040B						100	100	90-110	0	3
Batch number: 11145039403A	Sample number(s): 6296035-6296040,6296042-6296044									
18a pH by 9045C						100		95-105		
Batch number: 11145039403B	Sample number(s): 6296045-6296047,6296050-6296054,6296056									
18a pH by 9045C						100		95-105		
Batch number: 11153162401B	Sample number(s): 6296039-6296040,6296044,6296052-6296053									
Moisture Content by 160.3						100		80-120		
Batch number: 11160162402A	Sample number(s): 6296035-6296038,6296042-6296043,6296045-6296050									
28a Moisture Content by 160.3						100		80-120		
Moisture Content by 160.3						100		80-120		
Moisture Content by 160.3						100		80-120		
Batch number: 11160162402B	Sample number(s): 6296051,6296054									

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Moisture Content by 160.3					100		80-120		
Batch number: 11304162401A	Sample number(s): 6296056								
Moisture Content by 160.3					100		80-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: E111462AA	Sample number(s): 6296035-6296037,6296039 UNSPK: P298873								
1,4-Dioxane	103	111	70-130	18	30				
Batch number: 11145SLD026	Sample number(s): 6296035-6296040,6296042-6296049,6296051-6296054,6296056 UNSPK: 6296047								
Acenaphthene	95	98	75-115	3	30				
Acenaphthylene	100	102	81-110	2	30				
Aniline	73	76	35-95	3	30				
Anthracene	98	98	75-115	0	30				
Benzidine	26*	29*	35-141	12	30				
Benzo(a)anthracene	101	99	65-122	2	30				
Benzo(a)pyrene	98	101	57-126	3	30				
Benzo(b)fluoranthene	97	99	59-125	2	30				
Benzo(g,h,i)perylene	101	101	59-127	1	30				
Benzo(k)fluoranthene	96	97	56-132	1	30				
Benzoic acid	57	62	10-173	9	30				
Benzyl alcohol	109	115	67-115	6	30				
4-Bromophenyl-phenylether	89	88	67-129	2	30				
Butylbenzylphthalate	112	108	73-134	4	30				
Di-n-butylphthalate	94	95	67-123	1	30				
Carbazole	99	101	64-120	2	30				
4-Chloro-3-methylphenol	109	111*	76-110	2	30				
4-Chloroaniline	76	82	23-95	8	30				
bis(2-Chloroethoxy)methane	89	91	75-104	3	30				
bis(2-Chloroethyl)ether	87	95	60-116	8	30				
bis(2-Chloroisopropyl)ether	86	93	55-142	7	30				
2-Chloronaphthalene	142*	83	50-141	53*	30				
2-Chlorophenol	101	106	73-121	5	30				
4-Chlorophenyl-phenylether	97	100	80-109	2	30				
Chrysene	99	99	62-128	0	30				
Dibenz(a,h)anthracene	102	101	65-125	1	30				
Dibenzofuran	100	101	71-112	1	30				
1,2-Dichlorobenzene	78	89	66-108	13	30				
1,3-Dichlorobenzene	75	85	63-109	12	30				
1,4-Dichlorobenzene	77	87	70-100	11	30				
3,3'-Dichlorobenzidine	77	78	16-119	1	30				
2,4-Dichlorophenol	103	103	78-117	0	30				
Diethylphthalate	99	101	66-118	1	30				
2,4-Dimethylphenol	93	95	78-110	3	30				
3,5-Dimethylphenol	106	107	70-130	0	30				
Dimethylphthalate	96	98	64-118	2	30				
4,6-Dinitro-2-methylphenol	78	70	24-116	10	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
2,4-Dinitrophenol	66	53	20-143	22	30				
2,4-Dinitrotoluene	108	109	73-113	1	30				
2,6-Dinitrotoluene	102	102	69-123	1	30				
1,2-Diphenylhydrazine	93	94	71-129	1	30				
bis(2-Ethylhexyl)phthalate	113	106	63-122	6	30				
Fluoranthene	91	96	73-112	5	30				
Fluorene	101	104	77-111	3	30				
Hexachlorobenzene	93	95	77-114	1	30				
Hexachlorobutadiene	71	78	62-120	10	30				
Hexachlorocyclopentadiene	68	71	10-153	4	30				
Hexachloroethane	71	81	57-109	13	30				
Indeno(1,2,3-cd)pyrene	101	104	61-126	3	30				
Isophorone	94	96	73-102	3	30				
1-Methylnaphthalene	97	102	73-112	5	30				
2-Methylnaphthalene	91	94	76-114	3	30				
2-Methylphenol	99	105	75-111	6	30				
4-Methylphenol	108	111	71-111	3	30				
Naphthalene	88	91	72-116	3	30				
2-Nitroaniline	112	110	67-125	1	30				
3-Nitroaniline	111	112	59-122	0	30				
4-Nitroaniline	91	91	52-112	0	30				
Nitrobenzene	90	92	72-106	2	30				
2-Nitrophenol	99	97	74-115	2	30				
4-Nitrophenol	92	90	54-113	2	30				
N-Nitroso-di-n-propylamine	96	104	60-116	8	30				
N-Nitrosodimethylamine	86	88	47-116	2	30				
N-Nitrosodiphenylamine	92	94	86-145	2	30				
Di-n-octylphthalate	99	101	56-126	1	30				
Pentachlorophenol	86	84	28-127	2	30				
Phenanthrene	94	97	65-125	3	30				
Phenol	104	111	58-126	6	30				
Pyrene	110	102	74-126	8	30				
1,2,4-Trichlorobenzene	85	89	72-115	5	30				
2,4,5-Trichlorophenol	100	103	78-109	2	30				
2,4,6-Trichlorophenol	101	105	77-115	3	30				
Batch number: 11145SLF026	Sample number(s): 6296035-6296040,6296042-6296049,6296051-6296054,6296056 UNSPK: 6296047								
Acenaphthene	102	97	63-105	5	30				
Acenaphthylene	99	95	67-114	4	30				
Anthracene	105	102	60-122	3	30				
Benzo(a)anthracene	98	99	59-128	1	30				
Benzo(a)pyrene	126	125	45-138	0	30				
Benzo(b)fluoranthene	135	137	43-155	2	30				
Benzo(g,h,i)perylene	84	74	33-141	13	30				
Benzo(k)fluoranthene	129	130	42-144	1	30				
Butylbenzylphthalate	104	111	57-173	6	30				
Di-n-butylphthalate	122	117	65-148	4	30				
Chrysene	98	100	48-134	2	30				
Dibenz(a,h)anthracene	96	86	22-133	11	30				
Diethylphthalate	106	103	70-136	4	30				
Dimethylphthalate	104	101	74-118	3	30				
Bis(2-Ethylhexyl)phthalate	103	101	39-167	2	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Fluoranthene	112	119	26-166	6	30				
Fluorene	105	101	66-122	4	30				
Indeno(1,2,3-cd)pyrene	93	84	21-143	10	30				
1-Methylnaphthalene	101	94	72-123	7	30				
2-Methylnaphthalene	91	85	64-103	7	30				
Naphthalene	97	89	61-102	9	30				
N-Nitrosodimethylamine	102	96	48-113	6	30				
Di-n-octylphthalate	140	142	40-192	1	30				
Phenanthrene	103	104	12-165	0	30				
Pyrene	89	94	15-153	6	30				
Batch number: 11146SLE026	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
N-Nitrosodimethylamine	24*	24*	70-130	1	30				
Batch number: 11151B34A	Sample number(s): 6296036 UNSPK: P302747								
9a TPH by EPA 8015B Gas C5-C12	61	62	39-118	5	30				
Batch number: 111510006A	Sample number(s): 6296035-6296038,6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
4-Amino-2,6-Dinitrotoluene	113	110	80-127	3	50				
2-Amino-4,6-Dinitrotoluene	112	110	80-137	2	50				
1,3-Dinitrobenzene	116	114	38-166	2	50				
2,4-Dinitrotoluene	108	107	80-131	1	50				
2,6-Dinitrotoluene	111	109	80-127	1	50				
HMX	100	96	63-128	4	50				
Nitrobenzene	112	113	80-125	1	50				
Nitroglycerin	101	99	80-120	2	50				
2-Nitrotoluene	106	105	80-122	1	50				
3-Nitrotoluene	114	112	72-119	1	50				
4-Nitrotoluene	105	104	80-125	1	50				
PETN	127*	122*	80-121	4	50				
RDX	93	91	75-129	2	50				
Tetryl	92	80	55-174	13	50				
1,3,5-Trinitrobenzene	108	105	82-126	3	50				
2,4,6-Trinitrotoluene	112	108	82-130	3	50				
Batch number: 111450003A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
25a Formaldehyde 8315A	79*	78*	80-120	1	50				
Batch number: 111450020A	Sample number(s): 6296042-6296049,6296051-6296054,6296056 UNSPK: 6296047								
2,4-D	102	94	17-180	9	35				
Dalapon	58	46	10-125	24	50				
2,4-DB	62	68	10-201	9	50				
Dicamba	86	72	10-190	17	50				
Dinoseb	9*	7*	10-46	27	35				
2,4-DP (Dichlorprop)	100	87	33-178	15	50				
MCPA	89	74	10-213	18	50				
MCPP (Mecoprop)	70	78	10-184	11	50				
2,4,5-T	70	59	10-156	17	35				
2,4,5-TP	59	51	24-141	12	35				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 111520014A	Sample number(s): 6296036,6296039-6296040,6296042,6296054 UNSPK: 6296036								
6a Perchlorate EPA 6850	103	107	80-120	3	20				
Batch number: 111460034A	Sample number(s): 6296035-6296040,6296042-6296049,6296051-6296054,6296056 UNSPK: 6296047								
PCB-1016	87	109	29-146	22	50				
PCB-1260	98	109	39-149	11	50				
Batch number: 111470004A	Sample number(s): 6296042-6296049,6296051-6296054,6296056 UNSPK: 6296047								
Aldrin	39	45	16-126	14	50				
Alpha BHC	58	61	10-129	5	50				
Beta BHC	47	53	14-147	13	50				
Gamma BHC - Lindane	64	64	10-140	0	50				
p,p-DDD	51	56	16-163	8	50				
p,p-DDE	62	49	18-161	22	50				
p,p-DDT	95	134	10-176	21	50				
Delta BHC	50	53	23-140	6	50				
Dieldrin	62	47	19-154	22	50				
Endosulfan I	36	42	16-137	15	50				
Endosulfan II	31	52	28-154	52*	50				
Endosulfan Sulfate	57	57	21-160	0	50				
Endrin	48	55	11-149	12	50				
Endrin Aldehyde	39	34	10-148	17	35				
Endrin Ketone	33	43	22-165	24	50				
Heptachlor	70	76	13-126	8	50				
Heptachlor Epoxide	42	53	13-157	19	50				
Methoxychlor	72	96	32-147	28	50				
Batch number: 111450001A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
Diethylene glycol	40*	39*	59-109	4	20				
Ethylene glycol	60*	60*	63-107	1	20				
Propylene glycol	68	68	63-107	0	20				
Batch number: 111450035A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
Ethanol	66	64	48-130	2	20				
Isopropanol	71	71	12-149	1	20				
Methanol	71	69	43-138	2	20				
Batch number: 111480002A	Sample number(s): 6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
EFH (C12-C14)	0*	0*	49-123	0	20				
EFH (C15-C20)	40 (2)	118 (2)	49-123	15	20				
EFH (C21-C30)	-198 (2)	1919 (2)	49-123	63*	20				
EFH (C30 - C40)	-1805 (2)	3790 (2)	49-123	50*	20				
EFH (C8-C11)	0*	0*	49-123	0	20				
Batch number: 111510027A	Sample number(s): 6296036,6296042-6296043,6296045-6296049,6296051,6296054 UNSPK: 6296047								
m-Terphenyl	82	80	75-125	2	20				
o-Terphenyl	98	95	75-125	4	20				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
p-Terphenyl	94	93	75-125	1	20				
Batch number: 111570011A	Sample number(s): 6296036 UNSPK: P301476								
EFH (C12-C14)	0*	0*	49-123	0	20				
EFH (C15-C20)	-196 (2)	-43 (2)	49-123	26*	20				
EFH (C21-C30)	-889 (2)	-1432 (2)	49-123	31*	20				
EFH (C30 - C40)	-226 (2)	-1853 (2)	49-123	25*	20				
EFH (C8-C11)	0*	0*	49-123	0	20				
Batch number: 111515708001	Sample number(s): 6296035-6296040,6296042-6296054,6296056 UNSPK: 6296047 BKG: 6296047								
Aluminum	1488 (2)	2387 (2)	75-125	6	20	26,300	26,700	2	20
Boron	99	99	84-115	2	20	2.45 J	1.62 J	41* (1)	20
Calcium	-2319 (2)	-1985 (2)	75-125	15	20	16,100	7,380	74*	20
Iron	677 (2)	-340 (2)	75-125	4	20	27,900	27,800	0	20
Lithium	101	103	82-114	4	20	22.7	23.2	2	20
Magnesium	222 (2)	309 (2)	75-125	3	20	5,790	6,030	4	20
Manganese	138 (2)	29 (2)	75-125	12	20	393	379	4	20
Phosphorus	128*	89	75-125	8	20	311	300	4	20
Potassium	161*	154*	75-125	1	20	3,830	3,840	0	20
Sodium	98	98	75-125	1	20	124	122	2 (1)	20
Strontium	93	94	75-115	2	20	36.4	34.3	6	20
Tin	88	87	80-110	1	20	2.80 J	2.75 J	2 (1)	20
Titanium	215 (2)	285 (2)	75-125	4	20	1,450	1,410	3	20
Zirconium	94	94	75-125	2	20	6.08	5.92	3 (1)	20
Batch number: 111515711001	Sample number(s): 6296035-6296040,6296042-6296054,6296056 UNSPK: 6296047 BKG: 6296047								
Mercury	102	90	65-135	7	20	0.0403 J	0.0135 J	100* (1)	20
Batch number: 111541026001A	Sample number(s): 6296035-6296040,6296042-6296054,6296056 UNSPK: 6296047 BKG: 6296047								
Antimony	60*	74*	75-125	14	20	0.445	0.258	53* (1)	20
Arsenic	89	143*	75-125	11	20	7.11	5.29	29*	20
Beryllium	97	122	75-125	11	20	0.875	0.676	26*	20
Cadmium	103	135*	75-125	18	20	0.633	0.325	64* (1)	20
Chromium	100	85	75-125	4	20	26.2	24.7	6	20
Cobalt	91	90	75-125	0	20	11.3	8.28	31*	20
Copper	102	144*	75-125	13	20	19.8	14.9	28*	20
Lead	121 (2)	249 (2)	75-125	16	20	17.4	15.0	15	20
Nickel	158*	145*	75-125	3	20	25.1	17.9	34*	20
Silver	126*	145*	75-125	14	20	0.0620 J	0.118	63* (1)	20
Thallium	107	150*	75-125	18	20	0.428	0.293	37* (1)	20
Vanadium	118 (2)	230 (2)	75-125	11	20	79.6	58.7	30*	20
Zinc	325 (2)	140 (2)	75-125	11	20	141	133	6	20
Batch number: 111541026001B	Sample number(s): 6296035-6296040,6296042-6296054,6296056 UNSPK: 6296047 BKG:								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc		DUP Conc		DUP RPD	Dup RPD Max
	6296047										
Selenium	109	122	75-125	10	20	0.202	J	0.121	J	50* (1)	20
Batch number: 111541026001C	Sample number(s): 6296035-6296040,6296042-6296054,6296056 UNSPK: 6296047 BKG: 6296047										
Molybdenum	122	141*	75-125	13	20	1.31		0.990		28*	20
Batch number: 111541026001D	Sample number(s): 6296035-6296040,6296042-6296054,6296056 UNSPK: 6296047 BKG: 6296047										
Barium	31 (2)	-349 (2)	75-125	24*	20	173		121		35*	20
Batch number: 11151102201A	Sample number(s): 6296036,6296042-6296043,6296045-6296048,6296050,6296054 UNSPK: 6296047 BKG: 6296047										
17a Cyanide by 9012B	106		75-125			0.17	U	0.18	U	0 (1)	20
Batch number: 11151102201B	Sample number(s): 6296051 UNSPK: 6296051 BKG: 6296051										
17a Cyanide by 9012B	106		75-125			0.18	U	0.18	U	0 (1)	20
Batch number: 11151621202A	Sample number(s): 6296035-6296040,6296042-6296045 UNSPK: 6296035 BKG: 6296035										
11a Anions by 300.0 - Fluoride	94		80-120			5.3		6.4		19	20
11a Anions by 300.0 - Nitrate	101		80-120			0.81	J	1.0	J	22* (1)	20
Batch number: 11151621202B	Sample number(s): 6296046-6296048,6296050-6296054,6296056 UNSPK: 6296047 BKG: 6296047										
11a Anions by 300.0 - Fluoride	55*		80-120			4.1		4.0		2 (1)	20
11a Anions by 300.0 - Nitrate	92		80-120			1.4	J	1.0	J	30* (1)	20
Batch number: 11152243201A	Sample number(s): 6296035-6296040,6296042-6296048,6296050-6296054,6296056 UNSPK: 6296047 BKG: 6296047										
3a Cr VI by EPA 7199	98		75-125			0.64	J	0.77	J	18 (1)	20
Batch number: 11153621201A	Sample number(s): 6296035-6296040,6296042-6296045 UNSPK: 6296035 BKG: 6296035										
7a Perchlorate EPA 314.0	116		80-120			9.0	U	9.0	U	0 (1)	15
Batch number: 11153621201B	Sample number(s): 6296046-6296048,6296050-6296054,6296056 UNSPK: 6296047 BKG: 6296047										
7a Perchlorate EPA 314.0	118		80-120			9.0	U	9.0	U	0 (1)	15
Batch number: 11145039403A	Sample number(s): 6296035-6296040,6296042-6296044 BKG: 6296035										
18a pH by 9045C						8.34		8.34		0	3
Batch number: 11145039403B	Sample number(s): 6296045-6296047,6296050-6296054,6296056 BKG: 6296047										
18a pH by 9045C						8.04		8.00		0	3
Batch number: 11153162401B	Sample number(s): 6296039-6296040,6296044,6296052-6296053 BKG: 6296040										
Moisture Content by 160.3						13.1		13.8		6	20
Batch number: 11160162402A	Sample number(s): 6296035-6296038,6296042-6296043,6296045-6296050 BKG: 6296047										
28a Moisture Content by 160.3						12.9		12.9		0	20
Moisture Content by 160.3						12.9		12.9		0	20
Moisture Content by 160.3						12.9		12.9		0	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 11160162402B	Sample number(s): 6296051,6296054					BKG: P301476			
Moisture Content by 160.3						9.5	9.8	2	20
Batch number: 11304162401A	Sample number(s): 6296056					BKG: 6296056			
Moisture Content by 160.3						39.6	36.6	8	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 1a Volatile Organics EPA 8260B
Batch number: B111471AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6296035	100	97	99	95
6296036	103	106	98	97
6296037	103	106	98	97
6296039	102	102	99	95
Blank	101	102	100	96
LCS	102	102	102	101
LCSD	100	100	102	100
Limits:	80-120	80-120	81-117	74-121

Analysis Name: 14b 1,4-Dioxane by 8260B SIM
Batch number: E111461AA

	Toluene-d8
6296041	106
Blank	106
LCS	106
LCSD	106
Limits:	80-120

Analysis Name: 14a 1,4-Dioxane by 8260B SIM
Batch number: E111462AA

	Toluene-d8
6296035	97
6296036	97
6296037	97
6296039	97
Blank	98
LCS	98
LCSD	98
MS	93
MSD	95

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Surrogate Quality Control

Limits: 70-130

Analysis Name: 1b Volatile Organics EPA8260
Batch number: L111471AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6296041	102	102	101	98
Blank	103	101	101	99
LCS	103	102	102	100
LCSD	102	102	103	101
Limits:	86-118	80-120	88-110	86-115

Analysis Name: 15b NDMA by 1625C
Batch number: 11144WAA026

	N-Nitrosodimethylamine-d6
6296055	106
Blank	97
LCS	96
LCSD	109
Limits:	50-150

Analysis Name: 4b Select SVOC EPA 8270SIM
Batch number: 11144WAK026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6296055	100	95	103
Blank	93	91	89
LCS	106	94	97
LCSD	108	101	103
Limits:	40-130	45-130	45-135

Analysis Name: 5a Semivolatiles by EPA 8270C
Batch number: 11145SLD026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6296035	94	90	95	84	81	88
6296036	94	90	99	83	81	89
6296037	96	93	96	83	83	88
6296038	87	84	93	76	75	81
6296039	92	90	87	77	74	81
6296040	98	92	96	80	80	91
6296042	85	85	87	79	84	73
6296043	95	92	92	88	89	84
6296044	80	79	85	77	82	73
6296045	91	87	96	85	91	83
6296046	91	88	92	85	90	82
6296047	96	92	104	81	81	88
6296048	101	94	104	85	83	90
6296049	103	95	104	86	84	86
6296051	92	86	93	86	90	77
6296052	92	86	95	86	89	80
6296053	76	74	83	75	78	74

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Surrogate Quality Control

6296054	92	88	93	87	89	79
6296056	87	85	90	84	88	74
Blank	91	90	101	84	84	76
LCS	90	86	91	74	69	72
MS	101	94	104	85	83	90
MSD	103	95	104	86	84	86
Limits:	25-120	25-130	35-130	40-130	45-130	45-135

Analysis Name: 4a Select SVOC EPA 8270SIM
Batch number: 11145SLF026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6296035	90	88	102
6296036	95	91	107
6296037	94	89	102
6296038	93	90	105
6296039	96	90	104
6296040	84	90	101
6296042	93	94	96
6296043	91	91	94
6296044	96	93	93
6296045	97	96	96
6296046	104	100	101
6296047	103	100	105
6296048	115	103	100
6296049	109	99	98
6296051	102	99	103
6296052	100	97	101
6296053	97	95	96
6296054	89	86	90
6296056	81	76	84
Blank	103	103	108
LCS	109	100	103
MS	115	103	100
MSD	109	99	98
Limits:	40-130	45-130	45-135

Analysis Name: 15a NDMA by 1625C
Batch number: 11146SLE026

	N-Nitrosodimethylamine-d6
6296036	67
6296042	94
6296043	129
6296045	90
6296046	91
6296047	152*
6296048	164*
6296049	143
6296051	160*
6296054	145
Blank	91
LCS	104
MS	164*

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Surrogate Quality Control

MSD 143

Limits: 50-150

Analysis Name: 5b Semivolatiles by EPA 8270C
Batch number: 11146WAD026

	2-Fluorophenol	Phenol-d6	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
6296055	50	31	98	86	88	85
Blank	59	36	96	91	88	84
LCS	62	40	94	86	88	84
LCSD	60	39	92	86	87	85
Limits:	20-130	20-120	30-130	40-130	45-130	45-135

Analysis Name: 9b TPH by EPA 8015B Gas C5-C12
Batch number: 11151A20A

	Trifluorotoluene-F
6296041	70
Blank	70
LCS	112
LCSD	108
Limits:	63-135

Analysis Name: 9a TPH by EPA 8015B Gas C5-C12
Batch number: 11151B34A

	Trifluorotoluene-F
6296036	71
Blank	76
LCS	79
LCSD	87
MS	74
MSD	74
Limits:	61-122

Analysis Name: 25b Formaldehyde 8315A
Batch number: 111440027A

	Butyraldehyde
6296055	62
Blank	65
LCS	62
LCSD	64
Limits:	45-145

Analysis Name: 25a Formaldehyde 8315A
Batch number: 111450003A

	Butyraldehyde
6296036	104
6296042	124
6296043	105

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Surrogate Quality Control

6296045	120
6296046	128*
6296047	125
6296048	127*
6296049	134*
6296051	120
6296054	125
Blank	125
LCS	121
MS	127*
MSD	134*

Limits: 64-126

Analysis Name: 13b Herbicides by EPA 8151
Batch number: 111450014A

	2,4-Dichlorophenylacetic acid
6296055	90
Blank	92
LCS	109
LCSD	106

Limits: 35-144

Analysis Name: 13a Herbicides by EPA 8151
Batch number: 111450020A

	2,4-Dichlorophenylacetic acid
6296042	87
6296043	87
6296044	89
6296045	99
6296046	84
6296047	89
6296048	100
6296049	95
6296051	81
6296052	94
6296053	104
6296054	93
6296056	295*
Blank	79
LCS	83
MS	100
MSD	95

Limits: 36-156

Analysis Name: 8a PCBs/PCTs by 8082
Batch number: 111460034A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6296035	104	94
6296036	105	94

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Surrogate Quality Control

6296037	100	96
6296038	97	90
6296039	107	100
6296040	107	79
6296042	82	82
6296043	99	94
6296044	107	105
6296045	112	93
6296046	105	78
6296047	108	88
6296048	106	85
6296049	98	82
6296051	103	88
6296052	101	86
6296053	121	105
6296054	113	90
6296056	68	55
Blank	121	107
LCS	120	109
MS	106	85
MSD	98	82
Limits:	53-139	45-120

Analysis Name: 12b Pesticides by 8081A
Batch number: 111460040A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6296055	94	58
Blank	100	88
LCS	98	107
LCSD	102	99
Limits:	52-141	40-144

Analysis Name: 8b PCBs/PCTs by 8082
Batch number: 111460041A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6296055	112	55
Blank	116	86
LCS	119	70
LCSD	116	97
Limits:	30-150	30-150

Analysis Name: 12a Pesticides by 8081A
Batch number: 111470004A

	Tetrachloro-m-xylene	Decachlorobiphenyl
6296042	97	79
6296043	79	119
6296044	79	178*
6296045	81	93
6296046	62	55
6296047	53	67
6296048	50	83

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Surrogate Quality Control

6296049	57	102
6296051	67	61
6296052	74	79
6296053	61	93
6296054	75	67
6296056	22*	119
Blank	34*	42
LCS	82	103
MS	50	44
MSD	57	56
Limits:	50-130	20-120

Analysis Name: 16a Energetics by 8330A
Batch number: 111510006A

	2-Nitro-m-xylene
6296035	133
6296036	127
6296037	132
6296038	124
6296042	123
6296043	118
6296045	120
6296046	129
6296047	125
6296048	126
6296049	122
6296051	123
6296054	123
Blank	119
LCS	126
LCSD	123
MS	126
MSD	122
Limits:	80-146

Analysis Name: 16b Energetics by 8330A
Batch number: 111580002A

	2-Nitro-m-xylene
6296055	110
Blank	106
LCS	104
LCSD	107
Limits:	50-134

Analysis Name: 21a Glycols by 8015B
Batch number: 111450001A

	Tetramethylene glycol
6296036	84
6296042	90
6296043	93
6296045	89

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Surrogate Quality Control

6296046	87
6296047	86
6296048	86
6296049	85
6296051	83
6296054	81
Blank	90
LCS	98
MS	86
MSD	85
Limits:	29-137

Analysis Name: 20b Terphenyls by 8015B
Batch number: 111450009A

	n-Triacontane-d62
6296055	27*
Blank	84
LCS	83
LCSD	80
Limits:	50-150

Analysis Name: 9b TPH by EPA 8015B Oil/Diesel
Batch number: 111450031A

	Chlorobenzene	Orthoterphenyl
6296055	74	86
Blank	101	95
LCS	92	100
LCSD	84	94
Limits:	28-152	52-131

Analysis Name: 19a Alcohols by 8015B
Batch number: 111450035A

	Acetone
6296036	73
6296042	70
6296043	72
6296045	69
6296046	70
6296047	70
6296048	74
6296049	76
6296051	68
6296054	68
Blank	87
LCS	86
MS	74
MSD	76
Limits:	42-138

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: CDM Federal Programs Corp. Group Number: 1248215
Reported: 11/04/11 at 11:53 AM

Surrogate Quality Control

Batch number: 111480002A

	Chlorobenzene	Orthoterphenyl
6296042	86	106
6296043	87	101
6296045	74	100
6296046	56	81
6296047	85	98
6296048	81	93
6296049	97	107
6296051	55	89
6296054	70	114
Blank	83	94
LCS	86	97
MS	81	93
MSD	97	107
Limits:	37-125	47-145

Analysis Name: 20a Terphenyls by 8015B
Batch number: 111510027A

	n-Triacontane-d62
6296036	92
6296042	110
6296043	159*
6296045	97
6296046	94
6296047	117
6296048	151*
6296049	130
6296051	77
6296054	108
Blank	92
LCS	94
MS	151*
MSD	130
Limits:	50-150

Analysis Name: 9a TPH by EPA 8015B Oil/Diesel
Batch number: 111570011A

	Chlorobenzene	Orthoterphenyl
6296036	72	89
Blank	77	93
LCS	89	95
MS	91	113
MSD	86	103
Limits:	37-125	47-145

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM	SSFL AREA IV COLLOCATED SOIL SAMPLING					PRIMARY FOR ALL LOCATIONS									VOCs			SECONDARY FOR ALL LOCATIONS									Other Instructions and Notes
NOTES: * Primary Analyses as indicated on sample labels **Secondary Analyses as indicated on sample labels $ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected						*Metals EPA 6010/6020/7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6850 (10%)	VOCs/EPA 8260B $	1,4-Dioxane EPA 8260SIM $	TPH-GRO EPA 8015B $	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**ANDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	
Samplers Signatures:																											
SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers																						
SL-084-SA5DN-SB-4.5	5/23/11	0925	SOIL	NONE	4-Encores										X	X											
SL-084-SA5DN-SB-4.0-5.0	5/23/11	0930	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X					
SL-089-SA5DN-SB-4.5	5/23/11	1020	SOIL	NONE	5-Encores										X	X	X										
SL-089-SA5DN-SB-4.0-5.0	5/23/11	1025	SOIL	NONE	4-16 oz jars	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	
SL-081-SA5DN-SB-4.5	5/23/11	1300	SOIL	NONE	5-Encores										X	X											
SL-081-SA5DN-SB-4.0-5.0	5/23/11	1310	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X					
SL-081-SA5DN-SB-9.0-10.0	5/23/11	1315	SOIL	NONE	3-16 oz jars	X	X	X	X	X	X	X	X									X					
SL-075-SA5DN-SB-4.5	5/23/11	1535	SOIL	NONE	4-Encores										X	X											
SL-075-SA5DN-SB-4.0-5.0	5/23/11	1540	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X													
SL-075-SA5DN-SB-9.0-10.0	5/23/11	1545	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X													
TB-052311	5/23/11	0600	WATER	HCl	4-40 mL VOA VIALS										X	X	X										TRIP BLANK
Relinquished by: (Signature)	Date/Time 05/23/2011 / 1700		Received for Laboratory by: (Signature)																								Laboratory: Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time 5/24/11 1010		Airbill No.(s) 8695 1441 7961, 7994, 8008,7972, 7983																								

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected

Samplers Signatures: T Pham

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020/SW7471A	*Fluoride EPA 300.0	*SVOCs EPA 8270C & PAHs 8270 SIM	*PCBs/PCTs EPA 8082	*Chlorin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6850 (10%)	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**N-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Tephenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	1-SS sleeve			X	X																	
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	1-SS sleeve			X	X																	
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-16 oz jars	X	X	X	X	X	X	X	X		X	X										
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-SS sleeve			X	X																	
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	1-SS sleeve			X	X																	
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	1-SS sleeve			X	X																	
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	4-16 oz jar	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	MS/MSD
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	2-SS sleeve			X	X																	MS/MSD
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	1-SS sleeve			X	X																	
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-16 oz jars	X	X	X	X	X	X	X	X		X	X										
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-SS sleeve			X	X																	
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-16 oz jars	X	X	X	X	X	X	X	X		X	X										
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-SS sleeve			X	X																	
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	2-16 oz jars	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	1-SS sleeve			X	X																	

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Laboratory:
	05/23/2011 / 1700		Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time	Airbill No.(s)	
	5/24/11 0900	8695 1441 7961, 7994, 8008,7972, 7983	

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
§ Moisture by EPA 160.3 will be performed on soil in 16 oz jar collected from the same interval from which Encores were collected

Samplers Signatures: TPM

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020/6/7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCDs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*1M EPA 9045C/9040B	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	12-1 liter ambers			X	X	X				X	X	X			X	X		X			
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NaOH	1-500 mL glass																X				
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	1-250 mL glass													X							
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	1-500 mL poly		X				X	X	X												
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	HNO3	1-500 mL poly	X																			
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	HCl	2-40 mL vial																			X	
EB05-SA5DN-SS-052311	05.23.11	1405	WATER	NONE	4-40 mL vial												X						X		

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Other Instructions and Notes
	05/23/2011 / 1700		Laboratory: Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time	Airbill No.(s)	
	Sheila Lopez	8695 1441 7961, 7994, 8008, 7972, 7983	

13013 1248215 6296035-56

CHAIN OF CUSTODY RECORD

CDM SSFL AREA IV COLLOCATED SOIL SAMPLING

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected

Samplers Signatures:

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020/7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Chromium EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**Methyl Mercury EPA Method 1630	**Organotin NOAA Status&Trends	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Tetraphyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8015B	Other Instructions and Notes
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Poly											X									
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	4-8 oz. Jars												X								
SED-035-SIV-SD	5.23.11	1500	WET SOIL	NONE	3-16 oz. Jars	X	X	X	X	X	X	X	X	X	X										
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Poly											X									
DUP01-SIV-SD	5.23.11	1510	WET SOIL	NONE	1-8 oz. Jars												X								
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber											X									
FB07-SIV-SS-052311	5.23.11	1600	WATER	NONE	1-L Amber												X								

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Laboratory:
	05/23/2011 / 1700		Lancaster Laboratories, Inc.
Received by: (Signature)	Date/Time	Airbill No.(s)	
	5/24/2011	8695 1441 7961, 7994, 8008,7972, 7983	

Nicole Maljovec

From: Hartman, Pamela [HartmanPM@cdm.com]
Sent: Tuesday, May 24, 2011 2:44 PM
To: Nicole Maljovec
Cc: Bloisa, Peggy
Subject: Corrections for SSFL COC 5.23.11

Attachments: COC_05_23_11_sediment(1).xlsx



COC_05_23_11_sediment(1).xlsx ...

Hi Nicole

Now that the dust has settled, Peggy and I have found my mistakes from yesterday. I have attached new updated COCs. I have highlighted the changes in red or yellow. These include:

1) SED-035-SIV-SD on the first two lines of the "Sediment Hole" COC should be SED-035-SIV-SDMS. The are the MS/MSD sample.

2) DUP01-SIV-SD should be DUP03-SIV-QC-052311

3) FB07-SIV-SS-052311 should be FB08-SIV-052311

4) For the COC starting with the sample name SL-015-SA5DN-SS-0.0-0.5, SVOCs and PCBs should only be analyzed from the sleeves and not from the jars.

5) The 6-40mL vials for the equipment blank will ship today.

Thank you !!

13013 1248215 G296035-5C

CHAIN OF CUSTODY RECORD

CDM | **SSFL AREA IV COLLOCATED SOIL SAMPLING**

NOTES:
*Primary Analyses as indicated on sample labels
**Secondary Analyses as indicated on sample labels
$ Moisture by EPA 160.3 will be performed on soil in 16 oz. jar collected from the same interval from which Encores were collected

Samplers Signatures:

SAMPLE NUMBER	DATE	TIME	MATRIX	Preservative	Type & No. of Containers	*Metals EPA 6010/6020B&7471A	*Fluoride EPA 300.0	SVOCs EPA 8270C & PAHs 8270 SIM	PCBs/PCTs EPA 8082	*Dioxin/Furan EPA 1613B	*Perchlorate EPA 314.0	*Hex Chrome EPA 7199	*pH EPA 9045C/9040B	Perchlorate Confirmation by EPA 6850 (10%)	*Pesticides EPA 8081A (surface soil only)	*Herbicides EPA 8151 (surface soil only)	**TPH-EFH EPA 8015B Mod.	**Nitrates EPA 300.0	**Formaldehyde EPA 8315A	**n-NDMA EPA 1625C	**Energetics EPA 8330A	**Cyanide EPA 9012B	**Terphenyls EPA 8015B	**Glycols EPA 8015B	**Alcohols EPA 8016B	Other Instructions and Notes
						PRIMARY FOR ALL LOCATIONS									SS ONLY		SECONDARY FOR ALL LOCATIONS										Amended COC
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
SL-015-SA5DN-SS-0.0-0.5	5/23/11	1210	SOIL	NONE	1-SS sleeve			X	X																	
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-016-SA5DN-SS-0.0-0.5	5/23/11	1140	SOIL	NONE	1-SS sleeve			X	X																	
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-16 oz jars	X	X			X	X	X	X		X	X										
SL-017-SA5DN-SS-0.0-0.5	5/23/11	1235	SOIL	NONE	1-SS sleeve			X	X																	
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-019-SA5DN-SS-0.0-0.5	5/23/11	1030	SOIL	NONE	1-SS sleeve			X	X																	
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-021-SA5DN-SS-0.0-0.5	5/23/11	1100	SOIL	NONE	1-SS sleeve			X	X																	
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	4-16 oz jar	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	MS/MSD
SL-022-SA5DN-SS-0.0-0.5MS	5/23/11	0925	SOIL	NONE	2-SS sleeve			X	X																	MS/MSD
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
SL-023-SA5DN-SS-0.0-0.5	5/23/11	1000	SOIL	NONE	1-SS sleeve			X	X																	
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-16 oz jars	X	X			X	X	X	X		X	X										
SL-052-SA5DN-SS-0.0-0.5	5/23/11	0900	SOIL	NONE	1-SS sleeve			X	X																	
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-16 oz jars	X	X			X	X	X	X		X	X										
SL-053-SA5DN-SS-0.0-0.5	5/23/11	0840	SOIL	NONE	1-SS sleeve			X	X																	
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	2-16 oz jars	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
DUP05-SA5DN-QC-052311	5/23/11	0935	SOIL	NONE	1-SS sleeve			X	X																	

Relinquished by: (*Signature*)	Date/Time	Received for Laboratory by: (*Signature*)	Laboratory:
	05/23/2011 / 1700		Lancaster Laboratories, Inc.
Received by: (*Signature*)	**Date/Time**	**Airbill No.(s)**	
		8695 1441 7961, 7994, 8008,7972, 7983	

July 28, 2011

Mr. Todd Burgesser
CDM
555 17th Street, Suite 1100
Denver, CO 80202

Dear Mr. Burgesser:

I am writing to inform you of revised analytical reports that are being issued for the following:

Project No. SSFL Area IV Collocated Soil Sampling

Group No. 1248215 **SDG. No.: DE159**

LLI Sample No.	Client Sample Identification	Collection Date
6296036	SL-089-SA5DN-SB-4.0-5.0 Soil	05/23/2011
6296042	SL-015-SA5DN-SS-0.0-0.5 Soil	05/23/2011
6296043	SL-016-SA5DN-SS-0.0-0.5 Soil	05/23/2011
6296044	SL-017-SA5DN-SS-0.0-0.5 Soil	05/23/2011
6296045	SL-019-SA5DN-SS-0.0-0.5 Soil	05/23/2011
6296047	SL-022-SA5DN-SS-0.0-0.5 Soil	05/23/2011
6296048	SL-022-SA5DN-SS-0.0-0.5MS Soil	05/23/2011
6296049	SL-022-SA5DN-SS-0.0-0.5MSD Soil	05/23/2011
6296051	SL-023-SA5DN-SS-0.0-0.5 Soil	05/23/2011
6296054	DUP05-SA5DN-QC-052311 Soil	05/23/2011

The correction to the data affects the Formaldehyde in Solids analysis only.

The LCS was out of specification at 76% (window 80-126%) for the first trial. The samples were re-extracted and reanalyzed on day 10, 3 days past the project holding time and the LCS recovered within the window. Due to analyst error, the re-extracted trial was reported although the project holding time of 7 days was not met. This mistake was caught during the data package review.

Per your request, the data is being reported from the first trial with a comment regarding the LCS and second trial confirmation.

The revised analytical report reflects this correction and is enclosed.

You are a valued client and we apologize for any inconvenience that this incident may have caused. If you have any questions or require further assistance, please call me at 717-656-2300, Ext. 1933. We appreciate your business and look forward to continuing to serve your laboratory needs.

Sincerely,



Sarah Snyder
Senior Specialist
Pesticide Residue Analysis

SS/mcs
Enclosures

cc: Nicole Maljovec

November 4, 2011

Mr. Todd Burgesser
CDM
555 17th Street Suite 1100
Denver, CO 80202

Dear Mr. Burgesser:

I am writing to inform you of revised analytical reports that are being issued for the following:

Project No. SSFL Area IV Collocated Soil Sampling

Group No. 1248215 **SDG No.: DE159**

LLI Sample No.	Client Sample Identification	Collection Date
6296056	SED-035-SIV-SD Sediment	5/23/11

In response to your inquiry regarding the moisture result, it was determined that the percent moisture value was incorrect when initially reported. After running the sample a second time in duplicate, the value was determined to be significantly higher than originally reported. We are sorry for the inconvenience and have corrected the data to reflect the revised moisture value.

The revised analytical report reflects this correction and is enclosed.

You are a valued client and we apologize for any inconvenience that this incident may have caused. If you have any questions or require further assistance, please call me at 717-656-2300, Ext. 1225. We appreciate your business and look forward to continuing to serve your laboratory needs.

Sincerely,

Chad Wettig
Chemist/Group Leader
Sample Support

CW/mcs
Enclosures

cc: Nicole L. Maljovec

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Appendix C
Data Usability Assessment Report
(On CD)

Appendix C
Data Usability Assessment Report

The purposes of this data usability and assessment report (DUAR) are to 1) summarize the data validation performed on the data sets for the sediment samples collected, and 2) determine whether the sample results meet the DQOs outlined in the *Draft Work Plan/Field Sampling and Analysis Plan Co-Located Chemical Sampling at Area IV Santa Susan Field Laboratory, Ventura County, California* (CDM 2010). Sediment samples were collected form drainages within Area IV and in the Northern Buffer Zone (NBZ). A sample of the sediment in the bottom of the Building 4056 excavation was also collected.

C.1 Usability Summary

For this data usability assessment, 23 data sets were reviewed. A data set consists of 20 or fewer samples grouped together for analyses depending on the time and date of when the samples were received by the laboratory. A data set is called a sample delivery group or SDG. The analyses performed are discussed in Section 2.5 of the Sediment Technical Memorandum (TM).

Samples were collected and analyzed in accordance with the work plan/field sampling and analysis plan (SAP) (CDM 2010). Deviations from what was prescribed were encountered during the field investigations and were discussed in Section 2.6 of the TM.

The data generated for drainage sediment samples are usable as reported with the data validation qualifiers added, with the exception of 117 individual analyte results (1.73 percent of all analytes) that were rejected (2 individual metal results, 79 individual pesticide results and 36 individual herbicide results). Specific details are provided in the validation reports in this Appendix and below in Section C.8.

C.2 Quality Assurance Objectives

Quality assurance (QA) objectives for measurement data are expressed in terms of precision, accuracy, representativeness, comparability, completeness, and sensitivity (PARCCS). The QA objectives provide a mechanism for ongoing QC and evaluating and measuring data quality throughout the project.

A review of the collected data is necessary to determine if data measurement objectives established in the work plan/SAP (CDM 2010) have been met. The following data measurement objectives were considered:

- Specification and adherence to analytical method and reporting detection limit requirements
- Identification of the appropriate laboratory analytical QC requirements and verification of whether these QC requirements were met

- Verification that measurement performance criteria (representativeness and completeness) for the data have been met

- Verification that field procedures were followed, deviations were documented, and determination of impact on data quality from these deviations

The data validation review of the QA objectives determines if the collected data are of sufficient quality (except for the rejected results) to support their intended use.

C.3 Summary of Field and Laboratory QA Activities

CDM completed sampling activities in accordance with the approved work plan/SAP (CDM 2010). A total of 40 sediment drainage samples were collected and analyzed. Table 2-1 in the Sediment Technical Memorandum provides a summary of the samples collected and the laboratory analyses requested.

Table C-1 in this report presents the SDGs and validation level for the drainage sediment sample data. An index of samples associated with each SDG is presented at the beginning of the data validation reports presented in this Appendix . The work plan/SAP (CDM 2010) defined the procedures to be followed and the data quality requirements for the field sampling events.

C.4 Field Quality QA/QC

Field QC samples, such as MS/MSDs and field duplicates, were to be collected at a frequency of 1 per 20 samples (5 percent) for MS/MSDs and field duplicates. Two MS/MSD samples were analyzed by LLI. Two field duplicate samples were collected. MS/MSD and field duplicate samples met the frequency requirements detailed in the work plan/SAP (CDM 2010). A third duplicate and MS/MSD sample was collected for methyl mercury and organotins analyses only.

As discussed in Section 2.3.2, one equipment rinsate blank sample was collected. The equipment rinsate blank results are presented on Table C-2. One field blank sample was collected for organotins and methyl mercury analyses only. The results for this sample are nondetect and are presented on Table C-3.

Temperature blanks were included with each shipment of samples.

The number of field quality control samples collected satisfies the minimum requirements for the drainage sediment sampling event except for the equipment blanks. Only one equipment rinsate blank associated with the sediment samples was collected. Two equipment rinsate blanks should have been collected per the number of sediment samples collected.

Most of the samples collected from the NBZ were in locations accessible only by foot, thus the sampling team was in the field all day. It was not feasible or safe to carry a cooler with ice to and from these locations, so a field decision was made that all sediment samples would be placed on ice at the end of the work day. This was done

so that all of the sediment samples were handled in the same manner, and some would not be refrigerated for a longer time than others prior to being shipped to the laboratory.

Field QA/QC objectives were accomplished through the use of appropriate sampling techniques and collection of the required QC samples at the required frequencies.

C.5 Laboratory Quality QA/QC

Analytical QA/QC was assessed by laboratory QC checks, method blanks, sample custody tracking, sample preservation, adherence to holding times, laboratory control samples (LCSs), MSs, calibration recoveries, surrogates, tuning criteria, second column confirmations, internal standards, serial dilutions, laboratory duplicates, and interference check standards. The majority of the laboratory QC sample criteria met project requirements as indicated in the data validation reports in Appendix C with the appropriate qualifiers applied. One hundred and seventeen individual analyte results (1.73 percent of the all analytes) were rejected and are discussed in detail in Section C.7 and C.8 and in the validation reports presented in this Appendix.

C.6 Data Validation Procedures

Data were validated by an independent data validation firm. All data validation was conducted in accordance with *EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review* (EPA 2004), *EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (EPA 2008), and *EPA Contract Laboratory Program National Functional Guidelines for Chlorinated Dioxin/Furan Data Review* (EPA 2005).

The data validation strategy employed was to validate 10 percent of the data according to EPA Level IV protocols (all QC parameters and raw data) and the remaining 90 percent according to EPA Level III (all QC parameters except calibrations and raw data) protocols.

Table C-1 shows all the SDGs for the drainage sediment samples and which SDGs were validated as Level III or Level IV. Some SDGs contain samples from other subareas[1] but all samples in an SDG were validated together.

In order to evaluate the quality of the laboratory and the validation firm, CDM chemists reviewed 10 percent of the drainage sediment sample SDGs. The purpose of the review was to identify any quality control issues with the laboratory not identified by the validation firm or any discrepancies in validation procedures by the validation firm. No additional qualifiers were applied to the data based on CDM's review.

[1] During the course of sampling for drainage sediment samples, EPA transitioned sampling into subarea 5B. Therefore some sample delivery groups contain sample results for both 5C and 5B.

C.7 Data Quality Indicators

This section summarizes the validation performed. Section C.8 summarizes by analyses the overall quality of the data based on the PARCCS parameters. Individual SDG validation reports with specific sample detail are provided in this Appendix .

Achievement of the DQOs was determined in part by the use of data quality indicators (DQIs) as described in the work plan/SAP (CDM 2010). These DQIs for measurement data are expressed in terms of PARCCS. The DQIs provide a mechanism for ongoing control to evaluate and measure data quality throughout the project. These criteria are defined in the sections below.

C.7.1 Precision

Precision is a quantitative term that estimates the reproducibility of a set of replicate measurements under a given set of conditions. It is defined as a measurement of mutual agreement between measurements of the same property and is expressed in terms of relative percent difference (RPD) between duplicate determinations.

RPD is calculated as follows:

RPD = absolute value [(C1-C2)/{(C1+C2)/2)}] x 100%

Where:

C1 = concentration of primary sample
C2 = concentration of duplicate sample

Field and analytical precision were determined from the review of the field duplicate results. The sample results were compared by calculating their RPDs. The field duplicate samples were collected in the same manner as the original samples but were collected in separate, individual containers, given separate sample identifiers, and treated as individual samples by the laboratory.

Laboratory RPD control limits are presented in the work plan/SAP (CDM 2010) or are laboratory specific. The field duplicate RPD criterion is 50 percent. For laboratory duplicates, if one or both of the sample results are less than 2 times the RL, a control limit of the RL absolute value is used for comparison.

The field duplicate RPD criterion is 50 percent. Field duplicates for this project are validated following the criteria where if one result is non-detect and the other result is above the reporting limit, the RPD result is shown as 200 percent and the field duplicate sample and parent sample results are qualified as estimated "J" or "UJ." If the field duplicate RPD was above the 50 percent criteria (and both sample results were above the RL), the field duplicate and parent sample results for that analyte are qualified as estimated "J."

Qualifiers are applied to applicable sample analyte results during the validation process based on laboratory and field RPD results. Details are discussed in the laboratory validation reports in this Appendix and are summarized in Section C.8. Table C-4 shows the field duplicate pairs and RPD results that were outside of criteria. All field duplicate RPD results are presented in Appendix C.

RPD objectives are analyte dependent. There is no discernable pattern or reason for the exceedances. No field sampling issues were identified from the RPD results that were outside of criteria and the exceedances are reasonable for this type of sampling activity.

C.7.2 Accuracy

Accuracy is the degree of agreement between a measurement and the accepted reference or true value and is a measure of the bias in a system. Accuracy of the data was assessed by comparing LCS recovery, MS recovery, calibration recovery, Inductively Coupled Plasma (ICP) interferences, and by performing serial dilution checks during metals analyses. Accuracy is expressed as percent recovery (%R), which is calculated by:

$$\text{Percent Recovery} = \frac{(\text{Total Analyte Found} - \text{Analyte Originally Present})}{\text{Analyte Added}} \times 100$$

Analytical accuracy for the entire data collection activity is difficult to assess because several sources of error exist. Errors can be introduced by any of the following:

- Sampling procedure
- Field contamination
- Sample preservation and handling
- Sample matrix
- Sample preparation
- Analytical techniques

Accuracy is maintained to the extent possible by adhering to the EPA method and approved field and analytical standard operating procedures.

Qualifiers were applied to applicable sample analyte results during the validation process based on laboratory accuracy results and are discussed in detail in the laboratory validation reports in Appendix C and are summarized in Section C.8.

Sample preservation, handling, and holding times are additional measures of accuracy of the data. All sample preservation and handling criteria were met or performed in a manner that addressed field conditions during sampling as discussed in Section 2.6. of the TM. Section 2.6 states that most of the samples collected from the NBZ were in locations accessible only by foot, thus the sampling team was in the field all day. It was not feasible or safe to carry a cooler with ice to and from these locations, so a field decision was made that all sediment samples would be placed on

ice at the end of the work day. This was done so that all of the sediment samples were handled in the same manner, and some would not be refrigerated for a longer time than others prior to being shipped to the laboratory.

C.7.3 Blank Contamination

Field blanks (e.g., equipment and trip) and laboratory method blanks are analyzed to identify possible sources of contamination. Contamination of a sample can be introduced by field sample collection methods, sample handling, preparation, and/or analysis. The laboratory validation reports in this Appendix and the summary in Section C.8 discuss the results qualified based on field and laboratory blank contamination.

The reported sample results were judged to be valid after validation. In general, all detected concentrations were below the RL indicating field sample collection and equipment decontamination activities were adequately performed.

C.7.4 Representativeness, Comparability, and Sensitivity

Representativeness, comparability, and sensitivity are achieved by using EPA-approved sampling procedures and analytical methodologies. By following the procedures described in the field sampling and analysis plan for this sampling event and future sampling events, sample analysis should yield results representative of environmental conditions at the time of sampling. Similarly, reasonable comparability of analytical results for this and future sampling events can be achieved if approved EPA analytical methods and standardized reporting units are employed.

C.7.4.1 Representativeness

Representativeness is a qualitative term that expresses the degree to which the sample data accurately and precisely represent the environmental conditions corresponding to the location and depth interval of sample collection. Requirements and procedures for sample collection are designed to maximize sample representativeness.

Representativeness also can be monitored by reviewing field documentation and/or by performing field audits. For this report, a detailed review was performed on the COC forms, field data collection forms, laboratory sample confirmation logs, and data validation packages. Laboratory QA/QC requirements were included in the work plan/SAP (CDM 2010) and laboratory statements of work (SOWs) to ensure that the laboratory analytical results were representative of true field conditions.

Field sampling accuracy was attained through strict adherence to the approved field sampling and analysis plan and by using approved standard operating procedures for field data collection. Based on this, the data should represent as near as possible the actual field conditions at the time of sampling.

Representativeness, has been achieved by the performed field work and laboratory analyses. The analytical data generated, that have not been rejected, are reviewed to be a representative characterization of the project area.

C.7.4.2 Comparability

Comparability is a qualitative term that expresses the confidence with which a data set can be compared with another. Strict adherence to standard sample collection procedures, analytical detection limits, and analytical methods assures that data from like samples and sample conditions are comparable. This comparability is independent of laboratory personnel, data reviewers, or sampling personnel. Comparability criteria are met for the project if, based on data review, the sample collection and analytical procedures are determined to have been followed, or defined to show that variations did not affect the values reported.

To ensure comparability of data generated for the site, standard sample collection procedures and Department of toxic Substances Control (DTSC)-approved analytical methods were utilized by CDM. The sample analyses were performed by LLI in Lancaster, Pennsylvania. Utilizing such procedures and methods enables the current data to be comparable with previous and future data sets generated with similar methods.

C.7.4.3 Sensitivity

Sensitivity is related to the ability to compare analytical results with project-specific levels of interest, such as risk-based screening levels or action levels. Analytical detection limits for the various sample analytes should be below the level of interest to allow an effective comparison.

Detection Limits

Each analytical method used during the sampling events was selected because it had potential to achieve target detection limits established for this project. For each analyte, target detection limits were established with the laboratory with the goal to achieve analytical results at or below regulatory comparison criteria.

The MDL is described in the methods and is defined as the concentration of an analyte that produces a signal with a 99 percent probability that the concentration is above that of a blank. A blank is a sample that does not contain measurable concentrations of the analyte of concern. Tested by statistical performance, calibration samples, and LCSs, MDLs represent the best fundamental measurement of instrument sensitivity and the basis for establishing RLs.

The laboratory RL is typically about 3 to 5 times higher than the method detection limit (MDL). The RL is a laboratory-specific number, which is variable based on the sample matrix, moisture content, and other sample-specific factors. When a sample has to be diluted before analysis, either because of matrix problems or to bring the instrument response within the linear dynamic range, the RL is raised by a factor corresponding to the dilution factor.

Laboratory results are reported according to rules that provide established certainty of detection and RLs. The result for an analyte is flagged with a "U" if that analyte was not detected, or qualified with a "J" flag if blank or other QC results fall outside the appropriate tolerance limits.

If an analyte is present at a concentration between the MDL and the RL, the analytical result is flagged with a "J," indicating an estimated quantity. Qualifying the result as an estimated concentration reflects increased uncertainty in the reported value.

RLs are a compromise between analytical sensitivity and precision. Setting low RLs can lead to poorly defensible data because of false positive (Type I) and/or false negative (Type II) errors, whereas elevated RLs can hamper site characterization. Laboratory determinations of MDLs are performed on non-typical samples (e.g., distilled water) leading to idealized limits. Confidence in detection limits increases with instrument signal level above the MDL, and higher limits mean better precision.

The following analyses and individual analyte sample results were qualified as estimated "J" due to the sample results being reported as detected and below the RL:

- Method 300 (Fluoride)
  - 5 individual analyte results
- Method 314 (Perchlorate)
  - 1 individual analyte results
- Method 6010B (Metals)
  - 127 individual analyte results
- Method 6020 (Metals)
  - 98 individual analyte results
- Method 6850 (Perchlorate)
  - 0 individual analyte results
- Method 7199 (Hexavalent Chromium)
  - 17 individual analyte results
- Method 7471A (Mercury)
  - 31 individual analyte results
- Method 8270C (SVOCs)
  - 39 individual analyte results
- Method 8270C SIM (SVOCs)
  - 211 individual analyte results
- Method 8081A (Pesticides)
  - 29 individual analyte results

- Method 8151A (Herbicides)
  - 24 individual analyte results

- Method 1613B (Dioxins/Furans)
  - 512 individual analyte results

- Method 8082 (PCBs)
  - 38 individual analyte results

In general, for the data validated in this report, detection limits for the sample results were low enough to compare to the action levels stated in the work plan/SAP (CDM 2010). The detection limits for this project are lower than "normal" environmental data analyses. Analytical laboratory methods are being modified in order to achieve these lower reporting limits. Current laboratory instrumentation technology can not achieve all of these low reporting limits, and this is why some of the RL's are above project criteria. These results are still considered usable for project decisions.

Data validation also determines the most valid analyte result to use for samples that are re-analyzed or diluted. These validated results are entered into the project database and used for decision-making.

C.8 Data Qualification Summary

The following bullets discuss the data validation qualifications, number of qualified results, and reasons for the qualifications. All individual analyte results discussed below were qualified as estimated "J/UJ," nondetect "U," or rejected "R" when indicated. Results that were qualified as estimated "J" or "UJ" are usable with caution. Results that were rejected "R" are not usable for any purpose. Specific details regarding sample numbers and analytes are presented in the validation reports located in Appendix C.

- Method 300.0 (Fluoride)

  - 10 individual fluoride results were qualified as estimated based on matrix spike %R results

  - 1 individual fluoride result was qualified as estimated based on field duplicate precision results

- Method 314 (Perchlorate) - No qualifiers were required based on validation criteria.

- Method 6010B (Metals)

  - 33 individual metal analyte results were qualified as estimated due to serial dilution %R results

- 24 individual metal analyte results were qualified as estimated based on laboratory duplicate precision results
- 1 individual metal analyte result was qualified as estimated based on field duplicate precision results
- 36 individual metal analyte results were qualified as estimated based on matrix spike %R results
- 37 individual metal analyte results were qualified as estimated based on analytes detected in the laboratory blanks

- Method 6020 (Metals)
  - 140 individual metal analyte results were qualified as estimated due to serial dilution %R results
  - 201 individual metal analyte results were qualified as estimated based on laboratory duplicate precision results.
  - 336 individual metal analyte results were qualified as estimated based on matrix spike %R criteria. Out of these results 2 antimony results were rejected due to this criterion.
  - 20 individual metal analyte results were qualified as estimated based on analytes detected in the laboratory blanks
- Method 6850 (Perchlorate) - No qualifiers were required based on validation criteria.
- Method 7199 (Hexavalent Chromium) - No qualifiers were required based on validation criteria.
- Method 7471A (Mercury) - No qualifiers were required based on validation criteria.
- Method 8270C (Semi-volatile Organic Compounds)
  - 1 individual SVOC analyte result was qualified as estimated based on field duplicate precision criteria
  - 2 individual SVOC analyte results were qualified as estimated based on matrix spike %R results
  - 8 individual SVOC analyte results were qualified as estimated based on laboratory control sample %R results
  - 2 individual SVOC analyte results were qualified as nondetect because of analytes detected in the laboratory blanks

- Method 8270C SIM (Polyaromatic Hydrocarbons)
  - 11 individual PAH analyte results were qualified as estimated based on field duplicate precision criteria
  - 3 individual PAH analyte results were qualified as estimated based on matrix spike %R results
  - 6 individual PAH analyte result was qualified as estimated based on internal standard recovery results
  - 35 individual PAH analyte results were qualified as estimated based on laboratory control sample %R results
  - 2 individual PAH analyte results were qualified as nondetect because of analytes detected in the laboratory blanks
  - 1 individual PAH analyte result was qualified as estimated based on calibration results
- Method 8081A (Pesticides)
  - 12 individual pesticide analyte results were qualified as estimated because the RPD results between the two columns were outside of criteria
  - 5 individual pesticide analyte results were qualified as estimated based on field duplicate precision criteria
  - 196 individual pesticide analyte results were qualified as estimated based on surrogate %R results; out of those results 79 individual pesticide analyte results were rejected based on this criterion
  - 29 individual pesticide analyte results were qualified as estimated based on calibration %R results
  - 13 individual pesticide analyte results were qualified as estimated based on laboratory control sample %R results
- Method 8082A (Polychlorinated Biphenyls)
  - 9 individual pesticide analyte results were qualified as estimated because the RPD results between the two columns were outside of criteria
  - 3 individual pesticide analyte results were qualified as estimated based on field duplicate precision criteria
  - 33 individual pesticide analyte results were qualified as estimated based on surrogate %R results

- 106 individual pesticide analyte results were qualified as estimated based on laboratory control sample %R results
- 1 individual PCB analyte result was qualified as estimated based on matrix spike %R recovery results

- Method 8151A (Herbicides)
  - 4 individual herbicide analyte results were qualified as estimated because the RPD results between the two columns were outside of criteria
  - 4 individual herbicide analyte results were qualified as estimated based on field duplicate precision criteria
  - 2 individual herbicide analyte results were qualified as estimated based on matrix spike %R results
  - 5 individual herbicide analyte results were qualified as estimated based on surrogate %R results
  - 21 individual herbicide analyte results were qualified as estimated based on calibration %R results
  - 34 individual herbicide analyte results were qualified as estimated based on laboratory control sample %R results; out of these results 36 individual herbicide analyte results were rejected based on this criterion
  - 1 individual herbicide analyte result was qualified as estimated based on analytes detected in the laboratory blanks
- Method EPA 1630M (Methyl Mercury) - No qualifiers were required based on validation criteria.
- National Oceanic and Atmospheric Administration (NOAA) Status and Trends (Organotins)
  - 1 monobutyltin result was qualified as estimated based on laboratory control sample %R results
- Method 1613B (Dioxins/Furans)
  - 1 individual dioxin analyte results were qualified as estimated based on field duplicate precision criteria
  - 4 individual dioxin analyte results were qualified as estimated based on sample concentrations being greater than the calibration range

- 203 individual dioxin analyte results were qualified as nondetect because of analytes detected in the laboratory blanks

Estimated detection limits (EDLs) for the dioxins are calculated for each sample. The EDLs for this analysis are very low, reported in ng/kg or parts per trillion, resulting in numerous results qualified as estimated "J" values because they were below the RL (Section C.7). Many of these estimated values have been subsequently qualified as nondetect "U" because the compound was detected in related laboratory blanks. The laboratory blank results correlate to the sample EDLs and low level detections of dioxin analytes are somewhat inevitable because of the nature and universal extent of the compounds. The dioxin levels found in the blanks were well below site-related action levels. Therefore, the resulting qualification of associated sample results as not detected or "U" qualified data do not falsely diminish identification of site-related contaminants.

C.9 Review of Selected Validation Reports

CDM performed a review of the validation reports identified in Table C-1. This review involved comparing the validation report results against the laboratory data packages as well as the validation guidance documents. All validation report results were verified against the laboratory data packages and validation documents were followed as required.

C.10 Data Completeness

Completeness of the data collection program is defined as the percentage of samples planned for collection as listed in the final work plan versus the actual number of samples collected during the field program (see equation A).

Completeness for acceptable data is defined as the percentage of acceptable data obtained judged to be valid versus the total quantity of data generated (see equation B). Acceptable data include both data that pass all the QC criteria (unqualified data) and data that may not pass all the QC criteria but had appropriate corrective actions taken (qualified but usable data).

A. $$\%\text{Completeness} = C \times \frac{100}{n}$$

Where:

C = actual number of samples collected
n = total number of samples planned

B. $$\%\text{Completeness} = V \times \frac{100}{n'}$$

Where:

V = number of measurements judged valid
n' = total number of measurements made

The overall completeness goal for these sampling events was 90 percent for all project data.

A total of 47 drainage sediment environmental samples were collected and analyzed. This sample count included field duplicates, MS/MSDs, and field blanks. A total of 48 samples were to be collected for analyses. As discussed in Section 2.6 of the Sediment Technical Memorandum, one equipment rinsate blank sample was not collected based on field conditions and locations. Ninety-eight percent of the samples identified in the work plan were collected meeting the completeness goal for the number of samples collected versus number of samples planned.

The completeness goal for acceptable data achieved was 98.3 percent of the number of measurements judged to be valid versus the total number of measurements made for all sample analyses for the drainage sediment samples. Table C-5, Completeness Calculation Summary, shows a summary of all results that were estimated or rejected.

The following individual analyte results were rejected per analyses:

- Method 6020
  - 2 individual metal analyte results out of 1449 results (0.31%)

- Method 8081A
  - 79 individual pesticide analyte results out of 840 results (9.49%)

- Method 8151A
  - 36 individual herbicide analyte results out of 400 results (9%)

The completeness goals for both the number of samples collected for all sampling events and the number of measurements judged to be valid were met.

Sample deviations are discussed in Section 2.6 of the Sediment Technical Memorandum. Deviations did not impact DQOs for this sampling event. The data reported, and not rejected, are suitable for their intended use for characterization of Area IV of SSFL. The DQIs identified in the work plan/SAP (CDM 2010) met appropriate criteria. The achievement of the completeness goals for the data provides sufficient quality data for project decisions.

C.11 Assessment of Data Usability and Reconciliation with Work Plan Goals

Ninety-eight percent of the data validated and reported and in this TM are suitable for their intended use for site characterization. Sample results that were rejected are not suitable for project use. The detection limits reported generally met the expected limits proposed by the analytical laboratory in their contract agreement with CDM.

Sample results that were qualified as estimated are usable for project decisions. Numerous dioxin results were qualified as estimated and/or nondetect due to the low detection limits. This data is considered usable for project decisions.

The achievement of the completeness goals for number of samples collected, and the number of sample results acceptable for use provides sufficient quality data to support project decisions as well. Field duplicate precision also met criteria a majority of the time. RPDs were outside criteria predominantly when the sample results were close to the RL and/or below the project required action limits. Decisions based on results close to the RL should be made with a degree of caution.

Table C-1 Sample Delivery Groups and Validation Levels

Sample Delivery Group	Level III Validation Performed	Level IV Validation Performed	CDM Review
DE036	YES		
DE037	YES		
DE038	YES		YES
DE039	YES		
DE040	YES		
DE042		YES	
DE045	YES		
DE046		YES	YES
DE050	YES		
DE051	YES		
DE060	YES		
DE159	YES		
DX020	YES		YES
DX021	YES		
DX022	YES		
DX023	YES		
DX024	YES		
DX026	YES		
DX029		YES	YES
DX033		YES	
DX034	YES		
DX038	YES		
DX087	YES		

Table C-2 Equipment Rinsate Blank Results for Drainage Sediment Samples

Sample Name:		EB01-SIV-121710	
EPA Sample Name:		6169018	
Sample Date:		2010-12-17	
Sample Type		Equipment Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**
1,2,3,4,6,7,8-HPCDD	pg/l	10.8	U
1,2,3,4,6,7,8-HPCDF	pg/l	10.8	U
1,2,3,4,7,8,9-HPCDF	pg/l	10.8	U
1,2,3,4,7,8-HxCDD	pg/l	10.8	U
1,2,3,4,7,8-HXCDF	pg/l	10.8	U
1,2,3,6,7,8-HXCDD	pg/l	10.8	U
1,2,3,6,7,8-HXCDF	pg/l	10.8	U
1,2,3,7,8,9-HXCDD	pg/l	10.8	U
1,2,3,7,8,9-HXCDF	pg/l	10.8	U
1,2,3,7,8-PECDD	pg/l	10.8	U
1,2,3,7,8-PECDF	pg/l	10.8	U
1,2,4-TRICHLOROBENZENE	ug/l	5	U
1,2-DICHLOROBENZENE	ug/l	5	U
1,2-Diphenylhydrazine/Azobenzene	ug/l	5	U
1,3-DICHLOROBENZENE	ug/l	5	UJ
1,4-DICHLOROBENZENE	ug/l	5	UJ
1-METHYLNAPHTHALENE	ug/l	0.052	U
2,3,4,6,7,8-HXCDF	pg/l	10.8	U
2,3,4,7,8-PECDF	pg/l	10.8	U
2,3,7,8-TCDD	pg/l	2.16	UJ
2,3,7,8-TCDF	pg/l	2.16	U
2,4,5-T	ug/l	0.052	U
2,4,5-TP (Silvex)	ug/l	0.052	U
2,4,5-TRICHLOROPHENOL	ug/l	5	U
2,4,6-TRICHLOROPHENOL	ug/l	5	U
2,4-D	ug/l	0.52	U
2,4-DB	ug/l	1	U
2,4-DICHLOROPHENOL	ug/l	5	U
2,4-DIMETHYLPHENOL	ug/l	10	U
2,4-DINITROPHENOL	ug/l	30	U
2,4-DINITROTOLUENE	ug/l	5	U
2,6-DINITROTOLUENE	ug/l	5	U
2-CHLORONAPHTHALENE	ug/l	5	U
2-CHLOROPHENOL	ug/l	5	U
2-METHYLNAPHTHALENE	ug/l	0.052	UJ
2-METHYLPHENOL	ug/l	5	U
2-NITROANILINE	ug/l	5	U
2-NITROPHENOL	ug/l	5	U
3,3'-DICHLOROBENZIDINE	ug/l	5	U
3,5-Dimethylphenol	ug/l	10	U
3-NITROANILINE	ug/l	5	U
4,4'-DDD	ug/l	0.021	U
4,4'-DDE	ug/l	0.021	U
4,4'-DDT	ug/l	0.021	U
4,6-DINITRO-2-METHYLPHENOL	ug/l	15	U
4-BROMOPHENYL-PHENYLETHER	ug/l	5	U
4-CHLORO-3-METHYLPHENOL	ug/l	5	U
4-CHLOROANILINE	ug/l	5	UJ
4-CHLOROPHENYL-PHENYLETHER	ug/l	5	U
4-METHYLPHENOL	ug/l	5	U
4-NITROANILINE	ug/l	5	U
4-NITROPHENOL	ug/l	30	U
ACENAPHTHENE	ug/l	0.052	U
ACENAPHTHYLENE	ug/l	0.052	U
ALDRIN	ug/l	0.01	U
ALPHA-BHC	ug/l	0.01	U
ALUMINUM	mg/l	0.2	U
ANILINE	ug/l	5	UJ
ANTHRACENE	ug/l	0.052	U
ANTIMONY	mg/l	0.001	U

Table C-2 Equipment Rinsate Blank Results for Drainage Sediment Samples

	Sample Name:	EB01-SIV-121710	
	EPA Sample Name:	6169018	
	Sample Date:	2010-12-17	
	Sample Type	Equipment Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**
AROCLOR 1016	ug/l	0.51	U
AROCLOR 1221	ug/l	0.51	U
AROCLOR 1232	ug/l	0.51	U
AROCLOR 1242	ug/l	0.51	U
AROCLOR 1248	ug/l	0.51	U
AROCLOR 1254	ug/l	0.51	U
AROCLOR 1260	ug/l	0.51	U
Aroclor 1262	ug/l	0.51	U
Aroclor 1268	ug/l	0.51	U
Aroclor 5432	ug/l	0.51	UJ
Aroclor 5442	ug/l	0.51	UJ
Aroclor 5460	ug/l	0.51	UJ
ARSENIC	mg/l	0.002	U
BARIUM	mg/l	0.002	U
BENZIDINE	ug/l	59	UJ
BENZO(A)ANTHRACENE	ug/l	0.052	U
BENZO(A)PYRENE	ug/l	0.052	U
BENZO(B)FLUORANTHENE	ug/l	0.052	U
BENZO(G,H,I)PERYLENE	ug/l	0.052	UJ
BENZO(K)FLUORANTHENE	ug/l	0.052	U
BENZOIC ACID	ug/l	15	UJ
BENZYL ALCOHOL	ug/l	15	U
BERYLLIUM	mg/l	0.0005	U
BETA-BHC	ug/l	0.01	U
BIS(2-CHLOROETHOXY)METHANE	ug/l	5	U
BIS(2-CHLOROETHYL) ETHER	ug/l	5	U
BIS(2-CHLOROISOPROPYL) ETHER	ug/l	5	U
BIS(2-ETHYLHEXYL)PHTHALATE	ug/l	1	U
BORON	mg/l	0.05	U
Butylbenzylphthalate	ug/l	1	U
CADMIUM	mg/l	0.0005	U
CALCIUM	mg/l	0.2	U
CARBAZOLE	ug/l	5	U
Chlordane	ug/l	0.51	U
CHROMIUM	mg/l	0.002	U
CHRYSENE	ug/l	0.052	U
COBALT	mg/l	0.0005	U
COPPER	mg/l	0.002	U
DALAPON	ug/l	1.3	U
DELTA-BHC	ug/l	0.01	U
DIBENZO(A,H)ANTHRACENE	ug/l	0.052	UJ
DIBENZOFURAN	ug/l	5	U
DICAMBA	ug/l	0.31	U
DICHLOROPROP	ug/l	0.52	U
DIELDRIN	ug/l	0.021	U
Diethylphthalate	ug/l	0.054	J
Dimethylphthalate	ug/l	1	U
Di-n-butylphthalate	ug/l	1	U
Di-n-octylphthalate	ug/l	1	U
DINOSEB	ug/l	0.52	U
ENDOSULFAN I	ug/l	0.01	U
ENDOSULFAN II	ug/l	0.021	U
ENDOSULFAN SULFATE	ug/l	0.021	U
ENDRIN	ug/l	0.021	U
ENDRIN ALDEHYDE	ug/l	0.1	U
ENDRIN KETONE	ug/l	0.021	U
FLUORANTHENE	ug/l	0.052	U
FLUORENE	ug/l	0.052	U
FLUORIDE	mg/l	0.1	U
gamma-BHC (Lindane)	ug/l	0.01	U

Table C-2 Equipment Rinsate Blank Results for Drainage Sediment Samples

	Sample Name:	EB01-SIV-121710	
	EPA Sample Name:	6169018	
	Sample Date:	2010-12-17	
	Sample Type	Equipment Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**
HEPTACHLOR	ug/l	0.01	U
HEPTACHLOR EPOXIDE	ug/l	0.01	U
HEXACHLOROBENZENE	ug/l	5	U
HEXACHLOROBUTADIENE	ug/l	5	U
HEXACHLOROCYCLOPENTADIENE	ug/l	15	UJ
HEXACHLOROETHANE	ug/l	5	U
HEXAVALENT CHROMIUM	ug/l	10	UJ
INDENO(1,2,3-CD)PYRENE	ug/l	0.052	UJ
IRON	mg/l	0.2	U
ISOPHORONE	ug/l	5	U
LEAD	mg/l	0.001	U
LITHIUM	mg/l	0.02	U
MAGNESIUM	mg/l	0.1	U
MANGANESE	mg/l	0.005	U
MCPA	ug/l	1000	U
MCPP	ug/l	210	U
MERCURY	mg/l	0.0002	U
METHOXYCHLOR	ug/l	0.1	U
MIREX	ug/l	0.26	U
MOLYBDENUM	mg/l	0.0005	U
NAPHTHALENE	ug/l	0.051	J
NICKEL	mg/l	0.002	U
NITROBENZENE	ug/l	5	U
N-NITROSODIMETHYLAMINE	ug/l	0.052	UJ
N-NITROSO-DI-N-PROPYLAMINE	ug/l	5	U
N-NITROSODIPHENYLAMINE	ug/l	5	U
OCDD	pg/l	13.7	J
OCDF	pg/l	21.6	U
PENTACHLOROPHENOL	ug/l	15	U
PERCHLORATE	ug/l	2	U
PHENANTHRENE	ug/l	0.052	UJ
PHENOL	ug/l	5	U
PHOSPHORUS	mg/l	0.1	U
POTASSIUM	mg/l	0.5	U
PYRENE	ug/l	0.052	U
SELENIUM	mg/l	0.002	U
SILVER	mg/l	0.0005	U
SODIUM	mg/l	1	U
STRONTIUM	mg/l	0.005	U
THALLIUM	mg/l	0.0005	U
TIN	mg/l	0.02	U
TITANIUM	mg/l	0.01	U
TOXAPHENE	ug/l	3.1	U
VANADIUM	mg/l	0.0005	U
ZINC	mg/l	0.015	U
Zirconium	mg/l	0.05	U

Notes:
ug/L - micrograms per liter
mg/L - milligrams per liter
pg/L - picograms per liter
ng/L - nanograms per liter
U - Nondetect
UJ - Estimated nondetect result
J - Estimated

Table C-3 - Field Blank Results for Drainage Sediment Samples

	Sample Name:	FB08-SIV-052311	
	EPA Sample Name:	1105316-03	
	Sample Date:	2011-05-23	
	Sample Type	Field Blank	
Analyte	**Units**	**Concentration**	**Final Qualifer**
Methyl Mercury	ng/l	0.05	U
Tetrabutyltin	ug/L	0.048	U
Tributyltin	ug/L	0.043	U
Dibutyltin	ug/L	0.038	U
Monobutyltin	ug/L	0.48	UJ

Notes:
ug/L - micrograms per liter
ng/L - nanograms per liter
U - Nondetect
UJ - Estimated nondetect result

Table C-4 - Field Duplicate Results for Drainage Sediment Samples

				Location	SED-002-SIV	SED-002-SIV	RPD or Absolute Criteria	SED-005-SIV	SED-005-SIV	RPD or Absolute Criteria
				Sample Name:	DUP02-SIV-QC-122110	SED-002-SIV-SD-0.0-0.5		DUP01-SIV-QC-122010	SED-005-SIV-SD-0.0-0.5	
				Sample Date	12/21/2010	12/21/2010		12/20/2010	12/20/2010	
				Start Depth:	0	0		0	0	
				End Depth:	0.5	0.5		0.5	0.5	
				Area:	SED	SED		SED	SED	
				Matrix:	SE	SE		SE	SE	
				Sample Type:	FD	N		FD	N	
Chemical Name:	CAS No.:	Lab Method:	Result Unit							
Aluminum	7429-90-5	6010B	mg/kg	13700	14600	-6.36		15100	15200	-0.66
Antimony	7440-36-0	6020	mg/kg	0.0806 J	0.111 J	-31.73		0.248 UJ	0.24 UJ	--
Arsenic	7440-38-2	6020	mg/kg	6.94 J	6.18 J	11.59		5.3 J	5.63 J	-6.04
Barium	7440-39-3	6020	mg/kg	112	104	7.41		122 J	113 J	7.66
Beryllium	7440-41-7	6020	mg/kg	0.565	0.574	-1.58		0.646	0.649	-0.46
Boron	7440-42-8	6010B	mg/kg	4.68 J	4.65 J	0.64		5 J	4.11 J	19.54
Cadmium	7440-43-9	6020	mg/kg	0.239 J	0.233 J	2.54		0.267 J	0.224 J	17.52
Calcium	7440-70-2	6010B	mg/kg	2800	2940	-4.88		2620	2560	2.32
Chromium	7440-47-3	6020	mg/kg	22 J	20.4 J	7.55		21.4 J	25.3 J	-16.70
Chromium VI	18540-29-9	7199	mg/kg	0.31 J	0.25 J	21.43		0.37 J	0.6 J	-47.42
Cobalt	7440-48-4	6020	mg/kg	6.5 J	5.89 J	9.85		6.69 J	6.97 J	-4.10
Copper	7440-50-8	6020	mg/kg	9.16 J	8.69 J	5.27		10.4 J	11 J	-5.61
Fluoride	16984-48-8	300	mg/kg	1.2 UJ	1.1 J	200.00		2.3 J	2.6 J	-12.24
Iron	7439-89-6	6010B	mg/kg	20400	22100	-8.00		18600	19200	-3.17
Lead	7439-92-1	6020	mg/kg	10.3 J	10 J	2.96		18.4 J	16.5 J	10.89
Lithium	7439-93-2	6010B	mg/kg	26.9	29.2	-8.20		22.7 J	22.6 J	0.44
Magnesium	7439-95-4	6010B	mg/kg	5760	6260	-8.32		4410	4420	-0.23
Manganese	7439-96-5	6010B	mg/kg	300	332	-10.13		287	287	0.00
Mercury	7439-97-6	7471A	mg/kg	0.11 U	0.114 U	-3.57		0.0285 J	0.0309 J	-8.08
Molybdenum	7439-98-7	6020	mg/kg	0.545 J	0.457 J	17.56		0.747 J	0.819 J	-9.20
Nickel	7440-02-0	6020	mg/kg	13.1 J	12.1 J	7.94		16.3 J	17.6 J	-7.67
Percent Moisture	MOIST	160.3M	%	15.9	16.4	-3.10		20.8	19.1	8.52
Perchlorate	14797-73-0	314	ug/kg	35.7 U	35.9 U	--		37.9 U	37.1 U	--
pH	pH	9045M	pH unit	6.52	6.51	0.15		5.94	6.64	-11.13
Phosphorus	7723-14-0	6010B	mg/kg	487	501	-2.83		462	451	2.41
Potassium	7440-09-7	6010B	mg/kg	3540	3940	-10.70		3130	3360	-7.09
Selenium	7782-49-2	6020	mg/kg	0.131 J	0.153 J	-15.49		0.183 J	0.199 J	-8.38
Silver	7440-22-4	6020	mg/kg	0.0362 J	0.0286 J	23.46		0.0727 J	0.0489 J	39.14
Sodium	7440-23-5	6010B	mg/kg	70.3 J	74.9 J	-6.34		75 J	75.7 J	-0.93
Strontium	7440-24-6	6010B	mg/kg	13.3	13.6	-2.23		16.2 J	15.8 J	2.50
Thallium	7440-28-0	6020	mg/kg	0.282	0.296	-4.84		0.366 J	0.358 J	2.21
Tin	7440-31-5	6010B	mg/kg	11.3 U	11.4 U	--		12.1 U	12 U	--
Titanium	7440-32-6	6010B	mg/kg	1260	1360	-7.63		1090	1140	-4.48
Vanadium	7440-62-2	6020	mg/kg	45.8 J	42.4 J	7.71		40.6 J	43.7 J	-7.35
Zinc	7440-66-6	6020	mg/kg	82.1	70.9	14.64		86.4 J	82.4 J	4.74
Zirconium	7440-67-7	6010B	mg/kg	3.82 J	4.42 J	-14.56		1.2 J	6 UJ	200.00
1,2,3,4,6,7,8-HpCDD	35822-46-9	1613B	ng/kg	2.04 J	2.08 J	-1.94		8.87	8.71	1.82
1,2,3,4,6,7,8-HpCDF	67562-39-4	1613B	ng/kg	0.494 J	0.578 J	-15.67		6.31 U	6.18 U	--
1,2,3,4,7,8,9-HpCDF	55673-89-7	1613B	ng/kg	5.95 U	5.98 U	--		6.31 U	6.18 U	--
1,2,3,4,7,8-HxCDD	39227-28-6	1613B	ng/kg	5.95 U	5.98 U	--		6.31 U	6.18 U	--
1,2,3,4,7,8-HxCDF	70648-26-9	1613B	ng/kg	5.95 U	5.98 U	--		6.31 U	6.18 U	--
1,2,3,6,7,8-HxCDD	57653-85-7	1613B	ng/kg	0.183 J	0.149 J	20.48		0.893 J	0.918 J	-2.76
1,2,3,6,7,8-HxCDF	57117-44-9	1613B	ng/kg	5.95 U	5.98 U	--		6.31 U	6.18 U	--
1,2,3,7,8,9-HxCDD	19408-74-3	1613B	ng/kg	5.95 U	5.98 U	--		0.927 J	0.99 J	-6.57
1,2,3,7,8,9-HxCDF	72918-21-9	1613B	ng/kg	5.95 U	5.98 U	--		6.31 U	6.18 U	--
1,2,3,7,8-PeCDD	40321-76-4	1613B	ng/kg	5.95 U	5.98 U	--		6.31 U	6.18 U	--
1,2,3,7,8-PeCDF	57117-41-6	1613B	ng/kg	5.95 U	5.98 U	--		1.94 J	2.12 J	-8.87
2,3,4,6,7,8-HxCDF	60851-34-5	1613B	ng/kg	5.95 U	5.98 U	--		6.31 U	6.18 U	--
2,3,4,7,8-PeCDF	57117-31-4	1613B	ng/kg	5.95 U	5.98 U	--		6.31 U	6.18 U	--
2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1.19 U	1.2 U	--		0.0424 J	1.24 UJ	200.00
2,3,7,8-TCDF	51207-31-9	1613B	ng/kg	0.176 J	0.112 J	44.44		4.94	4.44	10.66
Aroclor 1016	12674-11-2	8082	ug/kg	2 U	2 U	--		2.1 U	4.2 U	--
Aroclor 1221	11104-28-2	8082	ug/kg	2 U	2 U	--		2.1 U	4.2 U	--
Aroclor 1232	11141-16-5	8082	ug/kg	2 U	2 U	--		2.1 U	4.2 U	--
Aroclor 1242	53469-21-9	8082	ug/kg	2 U	2 U	--		2.1 U	4.2 U	--
Aroclor 1248	12672-29-6	8082	ug/kg	2 U	2 U	--		2.1 U	4.2 U	--
Aroclor 1254	11097-69-1	8082	ug/kg	2 U	2 U	--		2.1 UJ	12 J	200.00
Aroclor 1260	11096-82-5	8082	ug/kg	0.68 J	0.65 J	4.51		2.1 UJ	4.2 J	200.00
Aroclor 1262	37324-23-5	8082	ug/kg	2 U	2 U	--		2.1 U	4.2 U	--
Aroclor 1268	11100-14-4	8082	ug/kg	2 U	2 U	--		2.1 U	4.2 U	--
Aroclor 5432	63496-31-1	8082	ug/kg	3.9 UJ	3.9 UJ	--		4.2 UJ	8.2 UJ	--
Aroclor 5442	12642-23-8	8082	ug/kg	3.9 UJ	3.9 UJ	--		4.2 UJ	8.2 UJ	--
Aroclor 5460	11126-42-4	8082	ug/kg	1.9 J	1.3 J	37.50		4.2 UJ	8 J	200.00
OCDD	3268-87-9	1613B	ng/kg	14.7	13.8	6.32		70.8	62.3	12.77
OCDF	39001-02-0	1613B	ng/kg	11.9 U	12 U	--		3.65 J	3.16 J	14.39
2,2-Dichlor-Propionic Acid	75-99-0	8151A	ug/kg	11 U	11 U	--		11 UJ	11 UJ	--
2,4 DB	94-82-6	8151A	ug/kg	4.4 U	3.7 U	--		5.8 U	4.6 U	--
2,4,5-T	93-76-5	8151A	ug/kg	0.2 U	0.2 U	--		0.21 U	0.21 U	--
2,4,5-TP	93-72-1	8151A	ug/kg	0.18 J	0.2 UJ	200.00		0.18 J	0.21 UJ	200.00
2,4-D	94-75-7	8151A	ug/kg	4.3 U	4.3 U	--		4.5 UJ	4.4 UJ	--
4,4'-DDD	72-54-8	8081A	ug/kg	0.4 UJ	0.41 U	--		0.48 U	0.42 UJ	--
4,4'-DDE	72-55-9	8081A	ug/kg	0.4 UJ	0.41 U	--		0.71 J	0.53 UJ	200.00
4,4'-DDT	50-29-3	8081A	ug/kg	0.49 UJ	0.55 U	--		0.86 J	0.83 UJ	3.55
Aldrin	309-00-2	8081A	ug/kg	0.2 UJ	0.2 U	--		0.21 U	0.21 UJ	--
Alpha-BHC	319-84-6	8081A	ug/kg	0.2 UJ	0.2 UJ	--		0.21 U	0.21 UJ	--
Beta-BHC	319-85-7	8081A	ug/kg	0.2 UJ	0.2 U	--		0.21 U	0.21 UJ	--
Chlordane	57-74-9	8081A	ug/kg	4 UJ	4.1 U	--		4.3 U	4.2 UJ	--
Delta-BHC	319-86-8	8081A	ug/kg	0.2 UJ	0.2 U	--		0.21 U	0.21 UJ	--
Dicamba	1918-00-9	8151A	ug/kg	1.2 J	1.4 UJ	200.00		1.5 U	1.5 U	--
Dichlorprop	120-36-5	8151A	ug/kg	0.96 J	2 UJ	200.00		2.1 U	2.1 U	--
Dieldrin	60-57-1	8081A	ug/kg	0.4 UJ	0.41 U	--		0.43 U	0.42 UJ	--
Dinitrobutyl Phenol	88-85-7	8151A	ug/kg	2.9 R	2.9 R	--		3 UJ	3 UJ	--
Endosulfan I	959-98-8	8081A	ug/kg	0.2 UJ	0.2 U	--		0.21 U	0.21 UJ	--
Endosulfan II	33213-65-9	8081A	ug/kg	0.4 UJ	0.41 U	--		0.43 U	0.42 UJ	--
Endosulfan Sulfate	1031-07-8	8081A	ug/kg	0.4 UJ	0.41 U	--		0.43 U	0.42 UJ	--
Endrin	72-20-8	8081A	ug/kg	0.4 UJ	0.41 U	--		0.43 U	0.42 UJ	--
Endrin Aldehyde	7421-93-4	8081A	ug/kg	0.4 UJ	0.41 U	--		0.27 J	0.42 UJ	200.00
Endrin Ketone	53494-70-5	8081A	ug/kg	0.4 UJ	0.41 U	--		0.43 U	0.42 UJ	--
Gamma-BHC (Lindane)	58-89-9	8081A	ug/kg	0.2 UJ	0.2 UJ	--		0.21 U	0.21 UJ	--
Heptachlor	76-44-8	8081A	ug/kg	0.2 UJ	0.2 U	--		0.21 U	0.21 UJ	--
Heptachlor Epoxide	1024-57-3	8081A	ug/kg	0.2 UJ	0.2 U	--		0.078 J	0.21 UJ	200.00
MCPA	94-74-6	8151A	ug/kg	300 U	300 U	--		320 U	310 U	--
MCPP	93-65-2	8151A	ug/kg	300 U	300 U	--		320 U	310 U	--
Methoxychlor	72-43-5	8081A	ug/kg	2 UJ	2 U	--		2.1 U	2.1 UJ	--
Mirex	2385-85-5	8081A	ug/kg	0.4 UJ	0.41 U	--		0.095 J	0.42 UJ	200.00
Toxaphene	8001-35-2	8081A	ug/kg	7.8 UJ	7.9 U	--		8.3 U	8.2 UJ	--
1,2,4-Trichlorobenzene	120-82-1	8270C	ug/kg	200 U	200 U	--		210 U	210 U	--
1,2-Dichlorobenzene	95-50-1	8270C	ug/kg	200 U	200 U	--		210 U	210 U	--
1,2-Diphenylhydrazine	122-66-7	8270C	ug/kg	200 U	200 U	--		210 U	210 U	--
1,3-Dichlorobenzene	541-73-1	8270C	ug/kg	200 U	200 U	--		210 U	210 U	--
1,4-Dichlorobenzene	106-46-7	8270C	ug/kg	200 U	200 U	--		210 U	210 U	--
1-Methylnaphthalene	90-12-0	8270C SIM	ug/kg	2 U	2 U	--		2.1 U	2.1 U	--

Table C-4 - Field Duplicate Results for Drainage Sediment Samples

				Location	SED-002-SIV	SED-002-SIV	RPD or Absolute Criteria	SED-005-SIV	SED-005-SIV	RPD or Absolute Criteria
				Sample Name:	DUP02-SIV-QC-122110	SED-002-SIV-SD-0.0-0.5		DUP01-SIV-QC-122010	SED-005-SIV-SD-0.0-0.5	
				Sample Date	12/21/2010	12/21/2010		12/20/2010	12/20/2010	
				Start Depth:	0	0		0	0	
				End Depth:	0.5	0.5		0.5	0.5	
				Area:	SED	SED		SED	SED	
				Matrix:	SE	SE		SE	SE	
				Sample Type:	FD	N		FD	N	
Chemical Name:	CAS No.:	Lab Method:	Result Unit							
Aluminum	7429-90-5	6010B	mg/kg	13700	14600	-6.36	15100	15200	-0.66	
Antimony	7440-36-0	6020	mg/kg	0.0806 J	0.111 J	-31.73	0.248 UJ	0.24 UJ	--	
2,4,5-Trichlorophenol	95-95-4	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
2,4,6-Trichlorophenol	88-06-2	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
2,4-Dichlorophenol	120-83-2	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
2,4-Dimethylphenol	105-67-9	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
2,4-Dinitrophenol	51-28-5	8270C	ug/kg	2400 U	2400 U	--	2500 U	2500 U	--	
2,4-Dinitrotoluene	121-14-2	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
2,6-Dinitrotoluene	606-20-2	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
2-Chloronaphthalene	91-58-7	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
2-Chlorophenol	95-57-8	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
2-Methylnaphthalene	91-57-6	8270C SIM	ug/kg	2 U	2 U	--	2.1 U	2.1 U	--	
2-Methylphenol	95-48-7	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
2-Nitroaniline	88-74-4	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
2-Nitrophenol	88-75-5	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
3,3`-Dichlorobenzidine	91-94-1	8270C	ug/kg	400 U	400 U	--	420 U	410 U	--	
3,5-Dimethylphenol	108-68-9	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
3-Nitroaniline	99-09-2	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
4,6-Dinitro-2-Methylphenol	534-52-1	8270C	ug/kg	590 U	600 U	--	630 U	620 U	--	
4-Bromophenyl Phenyl Ether	101-55-3	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
4-Chloro-3-Methylphenol	59-50-7	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
4-Chloroaniline	106-47-8	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
4-Chlorophenyl Phenylether	7005-72-3	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
4-Methylphenol	106-44-5	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
4-Nitroaniline	100-01-6	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
4-Nitrophenol	100-02-7	8270C	ug/kg	590 U	600 U	--	630 U	620 U	--	
Acenaphthene	83-32-9	8270C SIM	ug/kg	2 U	2 U	--	2.1 U	2.1 U	--	
Acenaphthylene	208-96-8	8270C SIM	ug/kg	0.47 J	2 UJ	200*	2.1 U	2.1 U	--	
Aniline	62-53-3	8270C	ug/kg	590 U	600 U	--	630 U	620 U	--	
Anthracene	120-12-7	8270C SIM	ug/kg	2 U	2 U	--	2.1 U	2.1 U	--	
Benzidine	92-87-5	8270C	ug/kg	4000 U	4000 UJ	--	4200 U	4100 UJ	--	
Benzo(a)anthracene	56-55-3	8270C SIM	ug/kg	2 U	2 U	--	2.1 U	2.1 U	--	
Benzo(a)pyrene	50-32-8	8270C SIM	ug/kg	2 U	2 U	--	2.1 UJ	1.2 J	200.00	
Benzo(b)fluoranthene	205-99-2	8270C SIM	ug/kg	1.5 J	1.3 J	14.29	2.1 UJ	2.6 J	200.00	
Benzo(g,h,i)perylene	191-24-2	8270C SIM	ug/kg	2 U	2 UJ	--	2.1 UJ	1.9 J	200.00	
Benzo(k)fluoranthene	207-08-9	8270C SIM	ug/kg	2 U	2 U	--	2.1 UJ	0.84 J	200.00	
Benzoic Acid	65-85-0	8270C	ug/kg	590 U	600 U	--	630 U	620 U	--	
Benzyl Alcohol	100-51-6	8270C	ug/kg	590 U	600 U	--	630 U	620 U	--	
Bis(2-Chloroethoxy) methane	111-91-1	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
Bis(2-Chloroethyl) ether	111-44-4	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
bis(2-Chloroisopropyl) ether	39638-32-9	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
Bis(2-Ethylhexyl) phthalate	117-81-7	8270C	ug/kg	87 J	45 J	63.64	22 J	23 J	-4.44	
Butylbenzylphthalate	85-68-7	8270C SIM	ug/kg	21 U	22 U	--	23 U	22 U	--	
Carbazole	86-74-8	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
Chrysene	218-01-9	8270C SIM	ug/kg	1.1 J	0.9 J	20.00	0.71 J	2.6 J	-114.20	
Dibenzo(a,h)anthracene	53-70-3	8270C SIM	ug/kg	2 U	2 U	--	2.1 U	2.1 U	--	
Dibenzofuran	132-64-9	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
Diethylphthalate	84-66-2	8270C SIM	ug/kg	21 U	22 U	--	23 U	22 U	--	
Dimethylphthalate	131-11-3	8270C SIM	ug/kg	21 U	22 U	--	23 U	22 U	--	
Di-n-Butylphthalate	84-74-2	8270C SIM	ug/kg	21 U	22 U	--	23 U	22 U	--	
Di-N-Octyl Phthalate	117-84-0	8270C SIM	ug/kg	21 U	22 U	--	23 UJ	15 J	200.00	
Fluoranthene	206-44-0	8270C SIM	ug/kg	1.6 J	1.1 J	37.04	2.1 UJ	2.6 J	200.00	
Fluorene	86-73-7	8270C SIM	ug/kg	2 U	2 U	--	2.1 U	2.1 U	--	
Hexachlorobenzene	118-74-1	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
Hexachlorobutadiene	87-68-3	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
Hexachlorocyclopentadiene	77-47-4	8270C	ug/kg	590 U	600 U	--	630 U	620 U	--	
Hexachloroethane	67-72-1	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C SIM	ug/kg	2 U	2 U	--	2.1 UJ	1.4 J	200.00	
Isophorone	78-59-1	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
Naphthalene	91-20-3	8270C SIM	ug/kg	2.4	2.6 J	-8.00	2.1 U	2.1 U	--	
Nitrobenzene	98-95-3	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
N-Nitrosodimethylamine	62-75-9	8270C SIM	ug/kg	2 U	2 U	--	2.1 U	2.1 UJ	--	
N-Nitroso-Di-N-Propylamine	621-64-7	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
N-Nitrosodiphenylamine	86-30-6	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
Pentachlorophenol	87-86-5	8270C	ug/kg	590 U	600 U	--	630 U	620 U	--	
Phenanthrene	85-01-8	8270C SIM	ug/kg	1.1 J	0.93 J	16.75	0.85 J	1.6 J	-61.22	
Phenol	108-95-2	8270C	ug/kg	200 U	200 U	--	210 U	210 U	--	
Pyrene	129-00-0	8270C SIM	ug/kg	1.1 J	1.3 J	-16.67	2.1 UJ	2.1 J	200.00	

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per gram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate sample results only were estimated "J"
U - Nondetect
UJ - Estimated nondetect result
J - Estimated

Table C-5 Summary of Data Completeness Following Data Validation for Drainage Sediment Samples

	Number of Analyte Detections Without Qualifiers	Number of Estimated Results	Number of Rejected Results	Number of Non-Detect Results	Number of Estimated Non-Detect Results	Total Analytes Detect and Nondetect	Percent of Analyte Results Judged Valid Versus Total Analyte Results Collected
Inorganics	489	717	2	135	21	1364	99.85%
Dioxins	142	309	0	232	1	684	100%
Polychlorinated Biphenyls	31	62	0	312	75	480	100%
Pesticides	11	46	79	571	133	840	90.6%
Herbicides	21	30	36	295	18	400	91%
Semivolatiles	9	37	0	1885	10	1941	100%
Polyaromatic Hydrocarbons	162	223	0	526	28	939	100%
Completeness Total for All Drainage Sediment Samples Collected and Judged Valid							**98.27%**

Appendix C
Data Validation Reports
(On CD)

Appendix C. Samples by SDG EQuIS for Sediment

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
SED	SED-029-SIV-SD-0.0-0.5	DE036	SE	2010-12-13	FIELD
SED	SED-030-SIV-SD-0.0-0.5	DE036	SE	2010-12-13	FIELD
SED	SED-031-SIV-SD-0.0-0.5	DE036	SE	2010-12-13	FIELD
SED	SED-040-SIV-SD-0.0-0.5	DE036	SE	2010-12-13	FIELD
SED	SED-032-SIV-SD-0.0-0.5	DE037	SE	2010-12-13	FIELD
SED	SED-033-SIV-SD-0.0-0.5	DE037	SE	2010-12-13	FIELD
SED	SED-025-SIV-SD-0.0-0.5	DE038	SE	2010-12-14	FIELD
	TB-121410	DE039	WQ	2010-12-14	FIELD
SED	SED-022-SIV-SD-0.0-0.5	DE039	SE	2010-12-14	FIELD
SED	SED-023-SIV-SD-0.0-0.5	DE039	SE	2010-12-14	FIELD
SED	SED-024-SIV-SD-0.0-0.5	DE039	SE	2010-12-14	FIELD
SED	SED-026-SIV-SD-0.0-0.5	DE039	SE	2010-12-14	FIELD
SED	SED-027-SIV-SD-0.0-0.5	DE039	SE	2010-12-14	FIELD
SED	SED-016-SIV-SD-0.0-0.5	DE040	SE	2010-12-15	FIELD
SED	SED-018-SIV-SD-0.0-0.5	DE040	SE	2010-12-15	FIELD
SED	SED-021-SIV-SD-0.0-0.5	DE040	SE	2010-12-15	FIELD
SED	SED-011-SIV-SD-0.0-0.5	DE042	SE	2010-12-16	FIELD
SED	SED-013-SIV-SD-0.0-0.5	DE042	SE	2010-12-16	FIELD
SED	SED-017-SIV-SD-0.0-0.5	DE042	SE	2010-12-16	FIELD
SED	SED-019-SIV-SD-0.0-0.5	DE042	SE	2010-12-16	FIELD
SED	SED-020-SIV-SD-0.0-0.5	DE042	SE	2010-12-16	FIELD
	TB-121710	DE045	WQ	2010-12-17	FIELD
SED	EB01-SIV-121710	DE045	WQ	2010-12-17	FIELD
SED	SED-001-SIV-SD-0.0-0.5	DE045	SE	2010-12-17	FIELD
SED	SED-004-SIV-SD-0.0-0.5	DE045	SE	2010-12-17	FIELD
SED	SED-006-SIV-SD-0.0-0.5	DE045	SE	2010-12-17	FIELD
SED	SED-012-SIV-SD-0.0-0.5	DE045	SE	2010-12-17	FIELD
SED	SED-014-SIV-SD-0.0-0.5	DE045	SE	2010-12-17	FIELD
SED	DUP01-SIV-QC-122010	DE046	SE	2010-12-20	FIELD
SED	SED-003-SIV-SD-0.0-0.5	DE046	SE	2010-12-20	FIELD
SED	SED-005-SIV-SD-0.0-0.5	DE046	SE	2010-12-20	FIELD
SED	SED-007-SIV-SD-0.0-0.6	DE046	SE	2010-12-20	FIELD
SED	SED-008-SIV-SD-0.0-0.5	DE046	SE	2010-12-20	FIELD
SED	SED-034-SIV-SD-0.0-0.5	DE046	SE	2010-12-20	FIELD
SED	SED-037-SIV-SD-0.0-0.5	DE046	SE	2010-12-20	FIELD
SED	DUP02-SIV-QC-122110	DE050	SE	2010-12-21	FIELD
SED	SED-002-SIV-SD-0.0-0.5	DE050	SE	2010-12-21	FIELD
SED	SED-015-SIV-SD-0.0-0.5	DE050	SE	2010-12-21	FIELD
SED	SED-036-SIV-SD-0.0-0.5	DE050	SE	2010-12-21	FIELD
SED	SED-038-SIV-SD-0.0-0.5	DE050	SE	2010-12-21	FIELD
SED	SED-039-SIV-SD-0.0-0.5	DE050	SE	2010-12-21	FIELD
	TB-122210	DE051	WQ	2010-12-22	FIELD
SED	SED-010-SIV-SD-0.0-0.5	DE051	SE	2010-12-22	FIELD
	TB-011311	DE060	WQ	2011-01-13	FIELD
SED	SED-009-SIV-SD-0.0-0.5	DE060	SE	2011-01-13	FIELD
SED	SED-028-SIV-SD-0.0-0.5	DE060	SE	2011-01-13	FIELD
	TB-052311	DE159	WQ	2011-05-23	FIELD
SED	SED-035-SIV-SD-0.0-0.5	DE159	SE	2011-05-23	FIELD

Appendix C. Samples by SDG EQuIS for Sediment

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
SED	SED-029-SIV-SD-0.0-0.5	DX020	SE	2010-12-13	FIELD
SED	SED-030-SIV-SD-0.0-0.5	DX020	SE	2010-12-13	FIELD
SED	SED-031-SIV-SD-0.0-0.5	DX020	SE	2010-12-13	FIELD
SED	SED-040-SIV-SD-0.0-0.5	DX020	SE	2010-12-13	FIELD
SED	SED-032-SIV-SD-0.0-0.5	DX021	SE	2010-12-13	FIELD
SED	SED-033-SIV-SD-0.0-0.5	DX021	SE	2010-12-13	FIELD
SED	SED-025-SIV-SD-0.0-0.5	DX022	SE	2010-12-14	FIELD
SED	SED-022-SIV-SD-0.0-0.5	DX023	SE	2010-12-14	FIELD
SED	SED-023-SIV-SD-0.0-0.5	DX023	SE	2010-12-14	FIELD
SED	SED-024-SIV-SD-0.0-0.5	DX023	SE	2010-12-14	FIELD
SED	SED-026-SIV-SD-0.0-0.5	DX023	SE	2010-12-14	FIELD
SED	SED-027-SIV-SD-0.0-0.5	DX023	SE	2010-12-14	FIELD
SED	SED-016-SIV-SD-0.0-0.5	DX024	SE	2010-12-15	FIELD
SED	SED-018-SIV-SD-0.0-0.5	DX024	SE	2010-12-15	FIELD
SED	SED-021-SIV-SD-0.0-0.5	DX024	SE	2010-12-15	FIELD
SED	SED-011-SIV-SD-0.0-0.5	DX026	SE	2010-12-16	FIELD
SED	SED-013-SIV-SD-0.0-0.5	DX026	SE	2010-12-16	FIELD
SED	SED-017-SIV-SD-0.0-0.5	DX026	SE	2010-12-16	FIELD
SED	SED-019-SIV-SD-0.0-0.5	DX026	SE	2010-12-16	FIELD
SED	SED-020-SIV-SD-0.0-0.5	DX026	SE	2010-12-16	FIELD
SED	DUP01-SIV-QC-122010	DX029	SE	2010-12-20	FIELD
SED	EB01-SIV-121710	DX029	WQ	2010-12-17	FIELD
SED	SED-001-SIV-SD-0.0-0.5	DX029	SE	2010-12-17	FIELD
SED	SED-003-SIV-SD-0.0-0.5	DX029	SE	2010-12-20	FIELD
SED	SED-004-SIV-SD-0.0-0.5	DX029	SE	2010-12-17	FIELD
SED	SED-005-SIV-SD-0.0-0.5	DX029	SE	2010-12-20	FIELD
SED	SED-006-SIV-SD-0.0-0.5	DX029	SE	2010-12-17	FIELD
SED	SED-007-SIV-SD-0.0-0.6	DX029	SE	2010-12-20	FIELD
SED	SED-008-SIV-SD-0.0-0.5	DX029	SE	2010-12-20	FIELD
SED	SED-012-SIV-SD-0.0-0.5	DX029	SE	2010-12-17	FIELD
SED	SED-014-SIV-SD-0.0-0.5	DX029	SE	2010-12-17	FIELD
SED	SED-034-SIV-SD-0.0-0.5	DX029	SE	2010-12-20	FIELD
SED	SED-037-SIV-SD-0.0-0.5	DX029	SE	2010-12-20	FIELD
SED	DUP02-SIV-QC-122110	DX033	SE	2010-12-21	FIELD
SED	SED-002-SIV-SD-0.0-0.5	DX033	SE	2010-12-21	FIELD
SED	SED-015-SIV-SD-0.0-0.5	DX033	SE	2010-12-21	FIELD
SED	SED-036-SIV-SD-0.0-0.5	DX033	SE	2010-12-21	FIELD
SED	SED-038-SIV-SD-0.0-0.5	DX033	SE	2010-12-21	FIELD
SED	SED-039-SIV-SD-0.0-0.5	DX033	SE	2010-12-21	FIELD
SED	SED-010-SIV-SD-0.0-0.5	DX034	SE	2010-12-22	FIELD
SED	SED-009-SIV-SD-0.0-0.5	DX038	SE	2011-01-13	FIELD
SED	SED-028-SIV-SD-0.0-0.5	DX038	SE	2011-01-13	FIELD
SED	SED-035-SIV-SD-0.0-0.5	DX087	SE	2011-05-23	FIELD

SAMPLE DELIVERY GROUP

DE036

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3050B	6010B	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3050B	6020	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3060A	7199	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3550B	8081A	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3550B	8082	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3550B	8151A	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3550B	8270C	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3550B	8270C SIM	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	Gen Prep	9045M	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	METHOD	300.0	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	METHOD	314.0	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	METHOD	7471A	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3050B	6010B	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3050B	6020	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3060A	7199	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3550B	8081A	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3550B	8082	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3550B	8151A	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3550B	8270C	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3550B	8270C SIM	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	Gen Prep	9045M	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	METHOD	300.0	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	METHOD	314.0	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	METHOD	7471A	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3050B	6010B	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3060A	7199	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3550B	8081A	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3550B	8082	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3550B	8151A	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3550B	8270C	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3550B	8270C SIM	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	Gen Prep	9045M	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	METHOD	300.0	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	METHOD	314.0	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	METHOD	7471A	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3050B	6010B	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3050B	6020	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3060A	7199	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3550B	8081A	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3550B	8082	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3550B	8151A	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3550B	8270C	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3550B	8270C SIM	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	Gen Prep	9045M	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	METHOD	300.0	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	METHOD	314.0	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	METHOD	7471A	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3050B	6010B	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3050B	6020	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3060A	7199	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3550B	8081A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3550B	8082	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3550B	8151A	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3550B	8270C	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3550B	8270C SIM	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	Gen Prep	9045M	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	METHOD	300.0	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	METHOD	314.0	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	METHOD	7471A	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3050B	6010B	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3050B	6020	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3060A	7199	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3550B	8081A	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3550B	8082	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3550B	8151A	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3550B	8270C	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3550B	8270C SIM	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	Gen Prep	9045M	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	METHOD	300.0	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	METHOD	314.0	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	METHOD	7471A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3050B	6010B	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3050B	6020	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3060A	7199	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3550B	8081A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3550B	8082	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3550B	8151A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3550B	8270C	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3550B	8270C SIM	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	Gen Prep	9045M	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	METHOD	300.0	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	METHOD	314.0	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	METHOD	7471A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3050B	6010B	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3050B	6020	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3060A	7199	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3550B	8081A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3550B	8082	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3550B	8151A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3550B	8270C	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3550B	8270C SIM	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	METHOD	300.0	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	METHOD	314.0	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	METHOD	7471A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3050B	6010B	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3050B	6020	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3550B	8081A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3550B	8082	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3550B	8151A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3550B	8270C	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3550B	8270C SIM	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	METHOD	7471A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	3050B	6020	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	3060A	7199	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	Gen Prep	9045M	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	METHOD	300.0	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	METHOD	314.0	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	METHOD	7471A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	P163599	N	METHOD	6850	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	P163599M241911A	MSD	METHOD	6850	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	P163599R241905A	MS	METHOD	6850	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3050B	6010B	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3050B	6020	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3060A	7199	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3550B	8081A	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3550B	8082	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3550B	8151A	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3550B	8270C	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3550B	8270C SIM	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	Gen Prep	9045M	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	METHOD	300.0	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	METHOD	314.0	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	METHOD	7471A	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3050B	6010B	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3050B	6020	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3060A	7199	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3550B	8081A	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3550B	8151A	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3550B	8270C	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3550B	8270C SIM	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	Gen Prep	9045M	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	METHOD	300.0	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	METHOD	314.0	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	METHOD	7471A	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3050B	6010B	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3050B	6020	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3060A	7199	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3550B	8081A	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3550B	8082	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3550B	8151A	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3550B	8270C	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3550B	8270C SIM	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	Gen Prep	9045M	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	METHOD	300.0	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	METHOD	314.0	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	METHOD	7471A	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3050B	6010B	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3050B	6020	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3060A	7199	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3550B	8081A	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3550B	8082	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3550B	8151A	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3550B	8270C SIM	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	Gen Prep	9045M	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	METHOD	300.0	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	METHOD	314.0	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	METHOD	7471A	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3050B	6010B	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3050B	6020	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3060A	7199	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3550B	8081A	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3550B	8082	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3550B	8151A	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3550B	8270C	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3550B	8270C SIM	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	Gen Prep	9045M	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	METHOD	300.0	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	METHOD	314.0	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	METHOD	7471A	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3050B	6010B	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3050B	6020	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3060A	7199	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3550B	8081A	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3550B	8082	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3550B	8151A	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3550B	8270C	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3550B	8270C SIM	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	METHOD	300.0	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	METHOD	314.0	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	METHOD	7471A	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3050B	6010B	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3050B	6020	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3060A	7199	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3550B	8081A	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3550B	8082	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3550B	8151A	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3550B	8270C	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3550B	8270C SIM	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	Gen Prep	9045M	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	METHOD	300.0	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	METHOD	314.0	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	METHOD	7471A	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3050B	6010B	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3050B	6020	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3060A	7199	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3550B	8081A	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3550B	8082	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3550B	8151A	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3550B	8270C	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3550B	8270C SIM	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	Gen Prep	9045M	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	METHOD	300.0	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	METHOD	7471A	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5DUP	P163610D271838B	DUP	METHOD	300.0	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5MS	P163610R271852B	MS	METHOD	300.0	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3050B	6010B	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3050B	6020	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3060A	7199	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3550B	8081A	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3550B	8082	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3550B	8151A	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3550B	8270C	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3550B	8270C SIM	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	Gen Prep	9045M	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	METHOD	300.0	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	METHOD	314.0	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	METHOD	6850	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	METHOD	7471A	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5DUP	P163618D272230B	DUP	METHOD	314.0	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5DUP	P163618D291430B	DUP	Gen Prep	9045M	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5MS	P163618R272254B	MS	METHOD	314.0	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3050B	6010B	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3050B	6020	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3060A	7199	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3550B	8081A	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3550B	8082	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3550B	8151A	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3550B	8270C SIM	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	Gen Prep	9045M	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	METHOD	300.0	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	METHOD	314.0	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	METHOD	7471A	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3050B	6010B	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3050B	6020	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3060A	7199	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3550B	8081A	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3550B	8082	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3550B	8151A	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3550B	8270C	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3550B	8270C SIM	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	Gen Prep	9045M	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	METHOD	300.0	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	METHOD	314.0	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	METHOD	7471A	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3050B	6010B	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3050B	6020	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3060A	7199	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3550B	8081A	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3550B	8082	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3550B	8151A	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3550B	8270C	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3550B	8270C SIM	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	METHOD	300.0	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	METHOD	314.0	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	METHOD	7471A	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3050B	6010B	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3050B	6020	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3060A	7199	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3550B	8081A	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3550B	8082	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3550B	8151A	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3550B	8270C	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3550B	8270C SIM	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	Gen Prep	9045M	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	METHOD	300.0	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	METHOD	314.0	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-071-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:09:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-072-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:48:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.84	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-073-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.87	J	0.84	MDL	1.1	PQL	mg/Kg	J	Z, Q

Sample ID: SL-074-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-076-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:28:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-078-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 11:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-083-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:49:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-084-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:46:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.1		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: GENCHEM

Method: 314.0 **Matrix:** SO

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	11.8	J	9.6	MDL	31.8	PQL	ug/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	102	J	39.6	MDL	106	PQL	mg/Kg	J	Z

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.42	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.10	J	0.893	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	86.8	J	39.7	MDL	106	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.76	J	0.948	MDL	5.32	PQL	mg/Kg	J	Z
TIN	2.05	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	78.9	J	42.8	MDL	115	PQL	mg/Kg	J	Z

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.34	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.44	J	0.965	MDL	5.74	PQL	mg/Kg	J	Z

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 9:20:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	54.3	J	39.9	MDL	107	PQL	mg/Kg	J	Z

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.03	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	0.920	J	0.897	MDL	5.34	PQL	mg/Kg	J	Z

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	62.3	J	39.9	MDL	107	PQL	mg/Kg	J	Z

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.27	J	0.952	MDL	5.35	PQL	mg/Kg	J	Z
TIN	1.82	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.05	J	0.898	MDL	5.35	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-071-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 10:09:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.15	J	0.931	MDL	5.23	PQL	mg/Kg	J	Z
TIN	2.40	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	1.01	J	0.879	MDL	5.23	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:48:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	98.9	J	37.5	MDL	101	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:48:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.20	J	1.01	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.32	J	0.845	MDL	5.03	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:30:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	87.5	J	37.7	MDL	101	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.90	J	0.899	MDL	5.05	PQL	mg/Kg	J	Z
TIN	2.03	J	1.01	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.75	J	0.848	MDL	5.05	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.88	J	0.923	MDL	5.19	PQL	mg/Kg	J	Z
TIN	2.34	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.49	J	0.871	MDL	5.19	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.78	J	0.936	MDL	5.26	PQL	mg/Kg	J	Z
TIN	2.39	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.77	J	0.944	MDL	5.30	PQL	mg/Kg	J	Z
TIN	2.09	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.26	J	0.891	MDL	5.30	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:49:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	95.9	J	38.5	MDL	103	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.46	J	0.919	MDL	5.16	PQL	mg/Kg	J	Z
TIN	2.24	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.82	J	0.868	MDL	5.16	PQL	mg/Kg	J	Z

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	86.4	J	40.4	MDL	108	PQL	mg/Kg	J	Z

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.91	J	0.964	MDL	5.42	PQL	mg/Kg	J	Z
TIN	2.45	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.39	J	0.910	MDL	5.42	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	71.0	J	38.4	MDL	103	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	1.98	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.95	J	0.866	MDL	5.15	PQL	mg/Kg	J	Z

Sample ID: SL-089-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.20	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	3.43	J	0.874	MDL	5.20	PQL	mg/Kg	J	Z

Sample ID: SL-092-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.05	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.79	J	0.937	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.33	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	5.02	J	0.918	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.72	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	3.64	J	0.938	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.25	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.19	J	0.884	MDL	5.26	PQL	mg/Kg	J	Z

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.44	J	0.947	MDL	5.32	PQL	mg/Kg	J	Z
TIN	3.24	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.67	J	0.894	MDL	5.32	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.152	J	0.0417	MDL	0.417	PQL	mg/Kg	J	Z

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.750		0.0521	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	135		0.113	MDL	0.417	PQL	mg/Kg	J	E, A

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0625	MDL	0.208	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	7.83		0.0625	MDL	0.417	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.771		0.0167	MDL	0.104	PQL	mg/Kg	J	Q, E
CADMIUM	0.382		0.0375	MDL	0.104	PQL	mg/Kg	J	Q, FD
CHROMIUM	28.8		0.125	MDL	0.417	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	9.00		0.0208	MDL	0.104	PQL	mg/Kg	J	Q, E
COPPER	15.1		0.0688	MDL	0.417	PQL	mg/Kg	J	Q, E
LEAD	11.3		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, E
NICKEL	17.1		0.104	MDL	0.417	PQL	mg/Kg	J	Q, E
SILVER	1.22		0.0125	MDL	0.104	PQL	mg/Kg	J	Q, FD

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.694		0.0543	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	100		0.117	MDL	0.434	PQL	mg/Kg	J	E, A

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.191	J	0.0651	MDL	0.217	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	6.15		0.0651	MDL	0.434	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.463		0.0174	MDL	0.109	PQL	mg/Kg	J	Q, E
CADMIUM	0.902		0.0391	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	23.0		0.130	MDL	0.434	PQL	mg/Kg	J	Q
COBALT	6.94		0.0217	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	17.8		0.0717	MDL	0.434	PQL	mg/Kg	J	Q, E
LEAD	50.6		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, E
NICKEL	15.1		0.109	MDL	0.434	PQL	mg/Kg	J	Q, E
SILVER	0.147		0.0130	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.209	J	0.0478	MDL	0.478	PQL	mg/Kg	J	Z

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.876		0.0597	MDL	0.119	PQL	mg/Kg	J	Q

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	202		0.129	MDL	0.478	PQL	mg/Kg	J	E, A

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.115	J	0.0717	MDL	0.239	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	7.83		0.0717	MDL	0.478	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.785		0.0191	MDL	0.119	PQL	mg/Kg	J	Q, E
CADMIUM	0.461		0.0430	MDL	0.119	PQL	mg/Kg	J	Q
CHROMIUM	33.4		0.143	MDL	0.478	PQL	mg/Kg	J	Q
COBALT	9.86		0.0239	MDL	0.119	PQL	mg/Kg	J	Q, E
COPPER	18.1		0.0789	MDL	0.478	PQL	mg/Kg	J	Q, E
LEAD	19.8		0.0124	MDL	0.239	PQL	mg/Kg	J	Q, E
NICKEL	22.2		0.119	MDL	0.478	PQL	mg/Kg	J	Q, E
SILVER	0.0806	J	0.0143	MDL	0.119	PQL	mg/Kg	J	Z, Q

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 9:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.151	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 9:20:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.584		0.0550	MDL	0.110	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 9:20:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	112		0.119	MDL	0.440	PQL	mg/Kg	J	E, A

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 9:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0660	U	0.0660	MDL	0.220	PQL	mg/Kg	R	Q
ARSENIC	5.90		0.0660	MDL	0.440	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.546		0.0176	MDL	0.110	PQL	mg/Kg	J	Q, E
CADMIUM	0.255		0.0396	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	25.1		0.132	MDL	0.440	PQL	mg/Kg	J	Q
COBALT	7.18		0.0220	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	12.7		0.0726	MDL	0.440	PQL	mg/Kg	J	Q, E
LEAD	20.2		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, E
NICKEL	15.1		0.110	MDL	0.440	PQL	mg/Kg	J	Q, E
SILVER	0.0557	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.192		0.0393	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.129	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.471		0.0545	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.118	MDL	0.436	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-040-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 10:19:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0654	U	0.0654	MDL	0.218	PQL	mg/Kg	R	Q
ARSENIC	4.31		0.0654	MDL	0.436	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.503		0.0174	MDL	0.109	PQL	mg/Kg	J	Q, E
CHROMIUM	20.5		0.131	MDL	0.436	PQL	mg/Kg	J	Q
COBALT	6.78		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	9.21		0.0720	MDL	0.436	PQL	mg/Kg	J	Q, E
LEAD	10.8		0.0113	MDL	0.218	PQL	mg/Kg	J	Q, E
NICKEL	13.0		0.109	MDL	0.436	PQL	mg/Kg	J	Q, E
SILVER	0.0217	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q

Sample ID: SL-071-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:09:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0935	J	0.0423	MDL	0.423	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:09:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.620		0.0528	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-071-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:09:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.114	MDL	0.423	PQL	mg/Kg	J	E, A

Sample ID: SL-071-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:09:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.102	J	0.0634	MDL	0.211	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	6.17		0.0634	MDL	0.423	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.693		0.0169	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.210		0.0380	MDL	0.106	PQL	mg/Kg	J	Q, FD
CHROMIUM	25.5		0.127	MDL	0.423	PQL	mg/Kg	J	Q
COBALT	7.36		0.0211	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	11.9		0.0697	MDL	0.423	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-071-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:09:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	9.18		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, E
NICKEL	14.8		0.106	MDL	0.423	PQL	mg/Kg	J	Q, E
SILVER	0.241		0.0127	MDL	0.106	PQL	mg/Kg	J	Q, FD

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:48:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.114	J	0.0406	MDL	0.406	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:48:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.694		0.0508	MDL	0.102	PQL	mg/Kg	J	Q

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:48:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	135		0.110	MDL	0.406	PQL	mg/Kg	J	E, A

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:48:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0917	J	0.0609	MDL	0.203	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	6.07		0.0609	MDL	0.406	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.676		0.0162	MDL	0.102	PQL	mg/Kg	J	Q, E
CADMIUM	0.411		0.0366	MDL	0.102	PQL	mg/Kg	J	Q
CHROMIUM	25.1		0.122	MDL	0.406	PQL	mg/Kg	J	Q
COBALT	7.26		0.0203	MDL	0.102	PQL	mg/Kg	J	Q, E
COPPER	12.6		0.0670	MDL	0.406	PQL	mg/Kg	J	Q, E
LEAD	13.0		0.0106	MDL	0.203	PQL	mg/Kg	J	Q, E
NICKEL	14.5		0.102	MDL	0.406	PQL	mg/Kg	J	Q, E
SILVER	3.17		0.0122	MDL	0.102	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-073-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:30:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.138	J	0.0412	MDL	0.412	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:30:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.956		0.0515	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-073-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:30:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	153		0.111	MDL	0.412	PQL	mg/Kg	J	E, A

Sample ID: SL-073-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0768	J	0.0618	MDL	0.206	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	6.02		0.0618	MDL	0.412	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.721		0.0165	MDL	0.103	PQL	mg/Kg	J	Q, E
CADMIUM	0.291		0.0371	MDL	0.103	PQL	mg/Kg	J	Q
CHROMIUM	28.2		0.124	MDL	0.412	PQL	mg/Kg	J	Q
COBALT	7.93		0.0206	MDL	0.103	PQL	mg/Kg	J	Q, E
COPPER	14.5		0.0680	MDL	0.412	PQL	mg/Kg	J	Q, E
LEAD	11.2		0.0107	MDL	0.206	PQL	mg/Kg	J	Q, E
NICKEL	17.9		0.103	MDL	0.412	PQL	mg/Kg	J	Q, E
SILVER	0.298		0.0124	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.315	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:15:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.725		0.0539	MDL	0.108	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:15:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.116	MDL	0.431	PQL	mg/Kg	J	E, A

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0647	U	0.0647	MDL	0.216	PQL	mg/Kg	R	Q
ARSENIC	6.82		0.0647	MDL	0.431	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.723		0.0173	MDL	0.108	PQL	mg/Kg	J	Q, E
CADMIUM	0.305		0.0388	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	29.6		0.129	MDL	0.431	PQL	mg/Kg	J	Q
COBALT	7.36		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	16.8		0.0712	MDL	0.431	PQL	mg/Kg	J	Q, E
LEAD	12.5		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, E
NICKEL	17.7		0.108	MDL	0.431	PQL	mg/Kg	J	Q, E
SILVER	0.405		0.0129	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.133	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.504		0.0531	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	135		0.115	MDL	0.425	PQL	mg/Kg	J	E, A

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0842	J	0.0638	MDL	0.213	PQL	mg/Kg	J	Z, Q, Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.92		0.0638	MDL	0.425	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.634		0.0170	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.211		0.0383	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	31.1		0.128	MDL	0.425	PQL	mg/Kg	J	Q
COBALT	8.21		0.0213	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	15.5		0.0701	MDL	0.425	PQL	mg/Kg	J	Q, E
LEAD	7.96		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, E
NICKEL	19.7		0.106	MDL	0.425	PQL	mg/Kg	J	Q, E
SILVER	0.0363	J	0.0128	MDL	0.106	PQL	mg/Kg	J	Z, Q

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.179	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.657		0.0540	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	166		0.117	MDL	0.432	PQL	mg/Kg	J	E, A

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.149	J	0.0649	MDL	0.216	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	6.22		0.0649	MDL	0.432	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.754		0.0173	MDL	0.108	PQL	mg/Kg	J	Q, E
CADMIUM	0.865		0.0389	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	31.0		0.130	MDL	0.432	PQL	mg/Kg	J	Q
COBALT	11.3		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	18.9		0.0713	MDL	0.432	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036
Laboratory: LL
EDD Filename: DE036_v1
eQAPP Name: CDM_SSFL_110509

Method Category: METALS
Method: 6020 **Matrix:** SO

Sample ID: SL-078-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 11:10:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	17.7		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, E
NICKEL	21.0		0.108	MDL	0.432	PQL	mg/Kg	J	Q, E
SILVER	1.65		0.0130	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-083-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:49:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.176	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:49:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.958		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-083-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:49:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	172		0.114	MDL	0.421	PQL	mg/Kg	J	E, A

Sample ID: SL-083-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:49:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.249		0.0632	MDL	0.211	PQL	mg/Kg	J	Q, Q, E
ARSENIC	10.2		0.0632	MDL	0.421	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.859		0.0168	MDL	0.105	PQL	mg/Kg	J	Q, E
CADMIUM	1.69		0.0379	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	41.4		0.126	MDL	0.421	PQL	mg/Kg	J	Q
COBALT	10.0		0.0211	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	25.9		0.0695	MDL	0.421	PQL	mg/Kg	J	Q, E
LEAD	77.7		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, E
NICKEL	23.0		0.105	MDL	0.421	PQL	mg/Kg	J	Q, E
SILVER	0.243		0.0126	MDL	0.105	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.203	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.552		0.0547	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	102		0.118	MDL	0.438	PQL	mg/Kg	J	E, A

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0656	U	0.0656	MDL	0.219	PQL	mg/Kg	R	Q
ARSENIC	5.67		0.0656	MDL	0.438	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.588		0.0175	MDL	0.109	PQL	mg/Kg	J	Q, E
CADMIUM	0.244		0.0394	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	23.6		0.131	MDL	0.438	PQL	mg/Kg	J	Q
COBALT	6.96		0.0219	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	12.2		0.0722	MDL	0.438	PQL	mg/Kg	J	Q, E
LEAD	7.40		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, E
NICKEL	13.9		0.109	MDL	0.438	PQL	mg/Kg	J	Q, E
SILVER	0.0361	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.140	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.902		0.0526	MDL	0.105	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-086-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:45:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	122		0.114	MDL	0.420	PQL	mg/Kg	J	E, A

Sample ID: SL-086-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:45:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0631	U	0.0631	MDL	0.210	PQL	mg/Kg	R	Q
ARSENIC	5.85		0.0631	MDL	0.420	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.729		0.0168	MDL	0.105	PQL	mg/Kg	J	Q, E
CADMIUM	0.287		0.0378	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	22.9		0.126	MDL	0.420	PQL	mg/Kg	J	Q
COBALT	7.16		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	10.5		0.0694	MDL	0.420	PQL	mg/Kg	J	Q, E
LEAD	9.17		0.0109	MDL	0.210	PQL	mg/Kg	J	Q, E
NICKEL	13.9		0.105	MDL	0.420	PQL	mg/Kg	J	Q, E
SILVER	0.0435	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q

Sample ID: SL-089-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 2:10:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.123	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-089-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 2:10:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	11.2		0.0531	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-089-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 2:10:00 **Analysis Type:** REA4 **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	155		0.287	MDL	1.06	PQL	mg/Kg	J	E, A

Sample ID: SL-089-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 2:10:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.297		0.0637	MDL	0.212	PQL	mg/Kg	J	Q, Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-089-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 2:10:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.50		0.0637	MDL	0.424	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.654		0.0170	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.664		0.0382	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	38.6		0.127	MDL	0.424	PQL	mg/Kg	J	Q
COBALT	7.96		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	19.4		0.0700	MDL	0.424	PQL	mg/Kg	J	Q, E
LEAD	34.0		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, E
NICKEL	19.8		0.106	MDL	0.424	PQL	mg/Kg	J	Q, E
SILVER	0.0831	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q

Sample ID: SL-092-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:27:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.320	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-092-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:27:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.606		0.0557	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-092-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:27:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	147		0.120	MDL	0.446	PQL	mg/Kg	J	E, A

Sample ID: SL-092-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:27:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0680	J	0.0669	MDL	0.223	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	8.56		0.0669	MDL	0.446	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.867		0.0178	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.285		0.0401	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	43.1		0.134	MDL	0.446	PQL	mg/Kg	J	Q
COBALT	12.3		0.0223	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	19.4		0.0736	MDL	0.446	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-092-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:27:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	12.7		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, E
NICKEL	23.3		0.111	MDL	0.446	PQL	mg/Kg	J	Q, E
SILVER	0.0392	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z, Q

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.273	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.455		0.0557	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	163		0.120	MDL	0.446	PQL	mg/Kg	J	E, A

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0708	J	0.0669	MDL	0.223	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	8.89		0.0669	MDL	0.446	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.976		0.0178	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.252		0.0401	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	45.8		0.134	MDL	0.446	PQL	mg/Kg	J	Q
COBALT	14.0		0.0223	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	19.4		0.0736	MDL	0.446	PQL	mg/Kg	J	Q, E
LEAD	13.6		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, E
NICKEL	23.7		0.111	MDL	0.446	PQL	mg/Kg	J	Q, E
SILVER	0.0321	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.152	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.26		0.0548	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	150		0.118	MDL	0.438	PQL	mg/Kg	J	E, A

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0657	U	0.0657	MDL	0.219	PQL	mg/Kg	R	Q
ARSENIC	7.15		0.0657	MDL	0.438	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.869		0.0175	MDL	0.110	PQL	mg/Kg	J	Q, E
CADMIUM	0.200		0.0394	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	30.4		0.131	MDL	0.438	PQL	mg/Kg	J	Q
COBALT	8.20		0.0219	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	13.1		0.0723	MDL	0.438	PQL	mg/Kg	J	Q, E
LEAD	9.99		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, E
NICKEL	18.1		0.110	MDL	0.438	PQL	mg/Kg	J	Q, E
SILVER	0.0876	J	0.0131	MDL	0.110	PQL	mg/Kg	J	Z, Q

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.160	J	0.0417	MDL	0.417	PQL	mg/Kg	J	Z

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.843		0.0521	MDL	0.104	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	130		0.113	MDL	0.417	PQL	mg/Kg	J	E, A

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.152	J	0.0625	MDL	0.208	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	5.85		0.0625	MDL	0.417	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.538		0.0167	MDL	0.104	PQL	mg/Kg	J	Q, E
CADMIUM	0.377		0.0375	MDL	0.104	PQL	mg/Kg	J	Q
CHROMIUM	27.9		0.125	MDL	0.417	PQL	mg/Kg	J	Q
COBALT	8.08		0.0208	MDL	0.104	PQL	mg/Kg	J	Q, E
COPPER	14.7		0.0688	MDL	0.417	PQL	mg/Kg	J	Q, E
LEAD	10.6		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, E
NICKEL	16.9		0.104	MDL	0.417	PQL	mg/Kg	J	Q, E
SILVER	0.0265	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z, Q

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.164	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.834		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	167		0.114	MDL	0.422	PQL	mg/Kg	J	E, A

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.120	J	0.0633	MDL	0.211	PQL	mg/Kg	J	Z, Q, Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.79		0.0633	MDL	0.422	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.915		0.0169	MDL	0.105	PQL	mg/Kg	J	Q, E
CADMIUM	0.902		0.0380	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	38.1		0.127	MDL	0.422	PQL	mg/Kg	J	Q
COBALT	9.42		0.0211	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	24.2		0.0696	MDL	0.422	PQL	mg/Kg	J	Q, E
LEAD	15.3		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, E
NICKEL	24.4		0.105	MDL	0.422	PQL	mg/Kg	J	Q, E
SILVER	3.63		0.0127	MDL	0.105	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.76	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z, FD

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.70	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:09:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.21	U	0.21	MDL	1.1	PQL	mg/Kg	UJ	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-072-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:48:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.51	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-078-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 11:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.86	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:49:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.91	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-084-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:46:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-089-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 2:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.58	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 7199 **Matrix:** SO

Sample ID: SL-092-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.59	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS **Method:** 7471A **Matrix:** SO

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0380	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0222	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0049	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0039	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0873	J	0.0029	MDL	0.100	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-073-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0132	J	0.0028	MDL	0.0993	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0204	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:28:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0066	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-078-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 11:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0142	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:49:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0414	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-084-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:46:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0086	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0098	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-236-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0341	J	0.0028	MDL	0.0993	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS
Method: 7471A **Matrix:** SO

Method Category: SVOA
Method: 8081A **Matrix:** SO

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.29	J	0.19	MDL	0.92	PQL	ug/Kg	J	Z

Sample ID: SL-071-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:09:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.24	U	0.24	MDL	0.36	PQL	ug/Kg	R	Q
ENDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	Q
HEPTACHLOR	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	R	Q

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:15:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.74	J	0.33	MDL	0.90	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	FD
AROCLOR 1254	2.1		0.35	MDL	1.8	PQL	ug/Kg	J	FD
AROCLOR 1260	3.9		0.35	MDL	1.8	PQL	ug/Kg	J	FD
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	2.6	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, L

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	11	U	11	MDL	37	PQL	ug/Kg	UJ	L
Aroclor 5442	11	U	11	MDL	37	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	170		11	MDL	37	PQL	ug/Kg	J	L

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	2.4	U	2.4	MDL	7.9	PQL	ug/Kg	UJ	L
Aroclor 5442	2.4	U	2.4	MDL	7.9	PQL	ug/Kg	UJ	L
Aroclor 5460	6.7	J	2.4	MDL	7.9	PQL	ug/Kg	J	Z, L

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 9:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	8.4	J	1.8	MDL	9.4	PQL	ug/Kg	J	Z
AROCLOR 1260	5.3	J	1.8	MDL	9.4	PQL	ug/Kg	J	Z
Aroclor 5432	5.6	U	5.6	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5442	5.6	U	5.6	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5460	9.3	J	5.6	MDL	18	PQL	ug/Kg	J	Z, L

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	4.2		1.1	MDL	3.6	PQL	ug/Kg	J	L

Sample ID: SL-071-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:09:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	6.7		0.35	MDL	1.8	PQL	ug/Kg	J	FD
AROCLOR 1254	13		0.35	MDL	1.8	PQL	ug/Kg	J	FD
AROCLOR 1260	8.5		0.35	MDL	1.8	PQL	ug/Kg	J	FD
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	4.3		1.1	MDL	3.5	PQL	ug/Kg	J	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	6.8		0.70	MDL	3.6	PQL	ug/Kg	J	S
AROCLOR 1260	22		0.70	MDL	3.6	PQL	ug/Kg	J	S
Aroclor 5432	2.1	U	2.1	MDL	7.0	PQL	ug/Kg	UJ	L
Aroclor 5442	2.1	U	2.1	MDL	7.0	PQL	ug/Kg	UJ	L
Aroclor 5460	27		2.1	MDL	7.0	PQL	ug/Kg	J	S, L

Sample ID: SL-073-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	5.6		1.1	MDL	3.5	PQL	ug/Kg	J	L

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	4.5	J	1.8	MDL	9.3	PQL	ug/Kg	J	Z
AROCLOR 1254	4.8	J	1.8	MDL	9.3	PQL	ug/Kg	J	Z
Aroclor 5432	5.4	U	5.4	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5442	5.4	U	5.4	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5460	8.9	J	5.4	MDL	18	PQL	ug/Kg	J	Z, L

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.7	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.1	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-083-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:49:00 *Analysis Type:* RES *Dilution:* 1000

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1100	U	1100	MDL	3600	PQL	ug/Kg	UJ	L
Aroclor 5442	1100	U	1100	MDL	3600	PQL	ug/Kg	UJ	L
Aroclor 5460	1100	U	1100	MDL	3600	PQL	ug/Kg	UJ	L

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	5.2		0.35	MDL	1.8	PQL	ug/Kg	J	S
AROCLOR 1254	3.6		0.35	MDL	1.8	PQL	ug/Kg	J	S
AROCLOR 1260	1.7	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, S
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.7	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, S, L

Sample ID: SL-089-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	6.6	J	1.8	MDL	9.1	PQL	ug/Kg	J	Z
Aroclor 5432	5.4	U	5.4	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5442	5.4	U	5.4	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5460	6.6	J	5.4	MDL	18	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-092-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	5.6	U	5.6	MDL	19	PQL	ug/Kg	UJ	L
Aroclor 5442	5.6	U	5.6	MDL	19	PQL	ug/Kg	UJ	L
Aroclor 5460	5.6	U	5.6	MDL	19	PQL	ug/Kg	UJ	L

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* RES *Dilution:* 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	57	U	57	MDL	190	PQL	ug/Kg	UJ	L
Aroclor 5442	57	U	57	MDL	190	PQL	ug/Kg	UJ	L
Aroclor 5460	57	U	57	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	5.3	U	5.3	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5442	5.3	U	5.3	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5460	5.3	U	5.3	MDL	18	PQL	ug/Kg	UJ	L

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* RES *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	11	U	11	MDL	36	PQL	ug/Kg	UJ	L
Aroclor 5442	11	U	11	MDL	36	PQL	ug/Kg	UJ	L
Aroclor 5460	110		11	MDL	36	PQL	ug/Kg	J	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.33		0.091	MDL	0.19	PQL	ug/Kg	J	S
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	3.0	J	1.4	MDL	4.3	PQL	ug/Kg	J	Z
DICAMBA	0.78	J	0.48	MDL	1.4	PQL	ug/Kg	J	Z
DINOSEB	0.96	U	0.96	MDL	2.9	PQL	ug/Kg	R	L

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 9:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.69	J	0.44	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-071-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:09:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DALAPON	4.7	U	4.7	MDL	9.6	PQL	ug/Kg	R	Q
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	1.4	J	1.3	MDL	3.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-073-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	1.9	J	1.3	MDL	3.9	PQL	ug/Kg	J	Z
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L
MCPA	230	J	83	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L
MCPP	130	J	80	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-083-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:49:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	4.3	U	4.3	MDL	13	PQL	ug/Kg	R	L

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L
MCPA	250	J	83	MDL	270	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.85	U	0.85	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-089-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.088	J	0.088	MDL	0.18	PQL	ug/Kg	J	Z
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-092-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.91	U	0.91	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.45	J	0.43	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	350	PQL	ug/Kg	UJ	L
BENZO(A)ANTHRACENE	30	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	33	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	60	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	33	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	24	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	29	J	18	MDL	350	PQL	ug/Kg	J	Z, FD
CHRYSENE	46	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	64	J	18	MDL	180	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	27	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	23	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	70	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	110	J	18	MDL	370	PQL	ug/Kg	J	Z
Butylbenzylphthalate	31	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	400	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	56	J	20	MDL	400	PQL	ug/Kg	J	Z

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 9:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	19	MDL	370	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SED-040-SIV-SD-0.0-0.5 ***Collected:*** 12/13/2010 10:19:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L

Sample ID: SL-071-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 10:09:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L
BENZIDINE	1200	U	1200	MDL	3600	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	18	U	18	MDL	360	PQL	ug/Kg	UJ	FD

Sample ID: SL-072-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:48:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	350	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	39	J	18	MDL	350	PQL	ug/Kg	J	Z
FLUORANTHENE	20	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-073-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	350	PQL	ug/Kg	UJ	L

Sample ID: SL-074-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:15:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	41	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:28:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	350	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	18	MDL	350	PQL	ug/Kg	J	Z
PYRENE	18	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

Sample ID: SL-083-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	18	MDL	360	PQL	ug/Kg	J	Z
FLUORANTHENE	22	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	23	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	350	PQL	ug/Kg	UJ	L

Sample ID: SL-089-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	330	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-092-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	350	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	18	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L
BENZO(A)PYRENE	22	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	29	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	18	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	18	MDL	370	PQL	ug/Kg	J	Z
PYRENE	21	J	18	MDL	180	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.74	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, FD
2-METHYLNAPHTHALENE	0.87	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.75	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, FD
ANTHRACENE	1.6	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, FD
DIBENZO(A,H)ANTHRACENE	2.6		0.71	MDL	1.8	PQL	ug/Kg	J	FD
Di-n-butylphthalate	6.7	J	6.4	MDL	19	PQL	ug/Kg	J	Z, FD
NAPHTHALENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SED-029-SIV-SD-0.0-0.5 ***Collected:*** 12/13/2010 11:52:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	4.4	J	3.7	MDL	18	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	9.6	J	7.4	MDL	18	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	9.6	J	7.4	MDL	18	PQL	ug/Kg	J	Z
Di-n-octylphthalate	97	J	66	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SED-030-SIV-SD-0.0-0.5 ***Collected:*** 12/13/2010 11:13:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.6	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.3	J	7.2	MDL	22	PQL	ug/Kg	J	Z
FLUORANTHENE	1.4	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	0.83	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	0.89	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SED-031-SIV-SD-0.0-0.5 ***Collected:*** 12/13/2010 9:20:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.43	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.99	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.85	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.2	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	13	J	6.7	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SED-040-SIV-SD-0.0-0.5 ***Collected:*** 12/13/2010 10:19:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.38	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.84	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.79	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.73	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-071-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 10:09:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	FD
2-METHYLNAPHTHALENE	0.74	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	18		0.36	MDL	1.8	PQL	ug/Kg	J	Q, FD
ANTHRACENE	6.9		0.36	MDL	1.8	PQL	ug/Kg	J	FD
BENZO(A)ANTHRACENE	73		0.71	MDL	1.8	PQL	ug/Kg	J	Q
BENZO(K)FLUORANTHENE	91		0.71	MDL	1.8	PQL	ug/Kg	J	Q
DIBENZO(A,H)ANTHRACENE	55		0.71	MDL	1.8	PQL	ug/Kg	J	Q, FD
Di-n-butylphthalate	6.4	U	6.4	MDL	19	PQL	ug/Kg	UJ	FD
NAPHTHALENE	3.3		0.71	MDL	1.8	PQL	ug/Kg	J	FD
PHENANTHRENE	54		0.71	MDL	1.8	PQL	ug/Kg	J	Q
PYRENE	85		0.71	MDL	1.8	PQL	ug/Kg	J	Q

Sample ID: SL-072-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:48:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.62	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.96	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.96	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-073-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	13	J	7.0	MDL	18	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	16	J	7.0	MDL	18	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	12	J	7.0	MDL	18	PQL	ug/Kg	J	Z
PYRENE	17	J	7.0	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-074-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.58	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.0	J	6.5	MDL	20	PQL	ug/Kg	J	Z
FLUORENE	0.80	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	9.7	J	7.4	MDL	18	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	11	J	7.4	MDL	18	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	16	J	7.4	MDL	18	PQL	ug/Kg	J	Z
CHRYSENE	17	J	3.7	MDL	18	PQL	ug/Kg	J	Z
FLUORANTHENE	16	J	7.4	MDL	18	PQL	ug/Kg	J	Z
PYRENE	13	J	7.4	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-083-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.3	J	6.5	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	0.78	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.78	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.45	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.89	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-089-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	10	J	6.4	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-092-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.78	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.88	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.7	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.96	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.91	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.89	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.96	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.6	J	6.8	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	1.7	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.4	J	6.4	MDL	19	PQL	ug/Kg	J	Z
Di-n-octylphthalate	11	J	6.4	MDL	19	PQL	ug/Kg	J	Z
FLUORANTHENE	1.7	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
INDENO(1,2,3-CD)PYRENE	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.40	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.1	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.4	J	6.6	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE036

Method Blank Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35108DB222357	12/20/2010 11:57:00 PM	ALUMINUM CALCIUM PHOSPHORUS STRONTIUM TIN	7.29 mg/Kg 12.8 mg/Kg 1.08 mg/Kg 0.0650 mg/Kg 1.20 mg/Kg	DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 SL-086-SA5B-SS-0.0-0.5 SL-089-SA5B-SS-0.0-0.5 SL-092-SA5B-SS-0.0-0.5 SL-103-SA5B-SS-0.0-0.5 SL-139-SA5B-SS-0.0-0.5 SL-301-SA5B-SS-0.0-0.5
P35408EB221919	12/21/2010 7:19:00 PM	ALUMINUM CALCIUM PHOSPHORUS TIN	5.43 mg/Kg 12.3 mg/Kg 1.70 mg/Kg 1.37 mg/Kg	SL-236-SA5B-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP04-SA5B-QC-121310(RES)	TIN	2.42 mg/Kg	2.42U mg/Kg
SED-029-SIV-SD-0.0-0.5(RES)	TIN	2.05 mg/Kg	2.05U mg/Kg
SED-030-SIV-SD-0.0-0.5(RES)	TIN	2.34 mg/Kg	2.34U mg/Kg
SED-031-SIV-SD-0.0-0.5(RES)	TIN	2.03 mg/Kg	2.03U mg/Kg
SED-040-SIV-SD-0.0-0.5(RES)	TIN	1.82 mg/Kg	1.82U mg/Kg
SL-071-SA5B-SS-0.0-0.5(RES)	TIN	2.40 mg/Kg	2.40U mg/Kg
SL-072-SA5B-SS-0.0-0.5(RES)	TIN	2.20 mg/Kg	2.20U mg/Kg
SL-073-SA5B-SS-0.0-0.5(RES)	TIN	2.03 mg/Kg	2.03U mg/Kg
SL-074-SA5B-SS-0.0-0.5(RES)	TIN	2.34 mg/Kg	2.34U mg/Kg
SL-076-SA5B-SS-0.0-0.5(RES)	TIN	2.39 mg/Kg	2.39U mg/Kg
SL-078-SA5B-SS-0.0-0.5(RES)	TIN	2.09 mg/Kg	2.09U mg/Kg
SL-083-SA5B-SS-0.0-0.5(RES)	TIN	2.24 mg/Kg	2.24U mg/Kg
SL-084-SA5B-SS-0.0-0.5(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-086-SA5B-SS-0.0-0.5(RES)	TIN	1.98 mg/Kg	1.98U mg/Kg
SL-089-SA5B-SS-0.0-0.5(RES)	TIN	2.20 mg/Kg	2.20U mg/Kg
SL-092-SA5B-SS-0.0-0.5(RES)	TIN	2.05 mg/Kg	2.05U mg/Kg
SL-103-SA5B-SS-0.0-0.5(RES)	TIN	2.33 mg/Kg	2.33U mg/Kg
SL-139-SA5B-SS-0.0-0.5(RES)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-236-SA5B-SS-0.0-0.5(REA3)	TIN	2.25 mg/Kg	2.25U mg/Kg
SL-301-SA5B-SS-0.0-0.5(RES)	TIN	3.24 mg/Kg	3.24U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35126BB220903A	12/26/2010 9:03:00 AM	COPPER	0.242 mg/Kg	DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 SL-086-SA5B-SS-0.0-0.5 SL-089-SA5B-SS-0.0-0.5 SL-092-SA5B-SS-0.0-0.5 SL-103-SA5B-SS-0.0-0.5 SL-139-SA5B-SS-0.0-0.5 SL-236-SA5B-SS-0.0-0.5 SL-301-SA5B-SS-0.0-0.5

Method: 6850
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BlankB241840A	12/21/2010 6:40:00 PM	PERCHLORATE	7.0 ug/Kg	SL-071-SA5B-SS-0.0-0.5 SL-236-SA5B-SS-0.0-0.5

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLH35B261033	12/23/2010 10:33:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	8.2 ug/Kg	DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 SL-086-SA5B-SS-0.0-0.5 SL-089-SA5B-SS-0.0-0.5 SL-092-SA5B-SS-0.0-0.5 SL-103-SA5B-SS-0.0-0.5 SL-139-SA5B-SS-0.0-0.5 SL-236-SA5B-SS-0.0-0.5 SL-301-SA5B-SS-0.0-0.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-071-SA5B-SS-0.0-0.5MS (SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 SL-139-SA5B-SS-0.0-0.5 SL-301-SA5B-SS-0.0-0.5)	FLUORIDE	78	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-071-SA5B-SS-0.0-0.5MS SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	4,4'-DDT ALDRIN	- 132	245 -	10.00-176.00 16.00-126.00	- -	4,4'-DDT ALDRIN	J(all detects)
SL-071-SA5B-SS-0.0-0.5MS SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	DIELDRIN ENDRIN HEPTACHLOR	0 0 0	- - -	19.00-154.00 11.00-149.00 13.00-126.00	200 (50.00) 200 (50.00) 200 (50.00)	DIELDRIN ENDRIN HEPTACHLOR	J(all detects) R(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-071-SA5B-SS-0.0-0.5MS SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	2,4,5-T 2,4-DB DICAMBA	- - 154	- - 127	25.00-132.00 20.00-170.00 33.00-120.00	68 (35.00) 62 (50.00) -	2,4,5-T 2,4-DB DICAMBA	J(all detects)
SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	DALAPON	-	0	12.00-86.00	200 (50.00)	DALAPON	J(all detects) R(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	2,4-DINITROPHENOL BENZOIC ACID	- -	- -	20.00-143.00 10.00-173.00	47 (30.00) 31 (30.00)	2,4-DINITROPHENOL BENZOIC ACID	J(all detects)
SL-071-SA5B-SS-0.0-0.5MS SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	BENZIDINE	16	20	35.00-141.00	-	BENZIDINE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-071-SA5B-SS-0.0-0.5MS SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	BENZO(A)ANTHRACENE	-87	-90	39.00-144.00	-	BENZO(A)ANTHRACENE	J(all detects) R(all non-detects)
	BENZO(A)PYRENE	-461	-441	34.00-156.00	-	BENZO(A)PYRENE	
	BENZO(B)FLUORANTHENE	-1536	-1472	43.00-155.00	-	BENZO(B)FLUORANTHENE	
	BENZO(G,H,I)PERYLENE	-401	-387	33.00-141.00	-	BENZO(G,H,I)PERYLENE	
	BENZO(K)FLUORANTHENE	-148	-137	42.00-144.00	-	BENZO(K)FLUORANTHENE	Fluoranthene, Chrysene, Benzo(b)fluoranthene, Benzo(a)pyrene, Indeno(123-cd)pyrene, Benzo(ghi)perylene No Qual, >4x
	CHRYSENE	-1058	-999	29.00-156.00	-	CHRYSENE	
	DIBENZO(A,H)ANTHRACENE	-49	-47	41.00-130.00	-	DIBENZO(A,H)ANTHRACENE	
	FLUORANTHENE	-326	-323	26.00-166.00	-	FLUORANTHENE	
	INDENO(1,2,3-CD)PYRENE	-643	-617	21.00-143.00	-	INDENO(1,2,3-CD)PYRENE	
	PHENANTHRENE	-43	-40	12.00-165.00	-	PHENANTHRENE	
	PYRENE	-111	-113	15.00-153.00	-	PYRENE	
SL-071-SA5B-SS-0.0-0.5MS SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	ACENAPHTHYLENE	49	52	55.00-126.00	-	ACENAPHTHYLENE	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-071-SA5B-SS-0.0-0.5MS SL-071-SA5B-SS-0.0-0.5MSD (DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 SL-086-SA5B-SS-0.0-0.5 SL-089-SA5B-SS-0.0-0.5 SL-092-SA5B-SS-0.0-0.5 SL-103-SA5B-SS-0.0-0.5 SL-139-SA5B-SS-0.0-0.5 SL-236-SA5B-SS-0.0-0.5 SL-301-SA5B-SS-0.0-0.5)	ARSENIC	188	166	75.00-125.00	-	ARSENIC	
	BERYLLIUM	146	142	75.00-125.00	-	BERYLLIUM	
	CADMIUM	133	139	75.00-125.00	-	CADMIUM	
	CHROMIUM	160	157	75.00-125.00	-	CHROMIUM	
	COBALT	127	126	75.00-125.00	-	COBALT	
	COPPER	138	151	75.00-125.00	-	COPPER	
	LEAD	179	193	75.00-125.00	-	LEAD	
	NICKEL	136	143	75.00-125.00	-	NICKEL	
	SILVER	-	129	75.00-125.00	-	SILVER	
	VANADIUM	204	201	75.00-125.00	-	VANADIUM	
	ZINC	222	321	75.00-125.00	-	ZINC	J(all detects) V, Zn No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**

Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-071-SA5B-SS-0.0-0.5MS **SL-071-SA5B-SS-0.0-0.5MSD** (DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 SL-086-SA5B-SS-0.0-0.5 SL-089-SA5B-SS-0.0-0.5 SL-092-SA5B-SS-0.0-0.5 SL-103-SA5B-SS-0.0-0.5 SL-139-SA5B-SS-0.0-0.5 SL-236-SA5B-SS-0.0-0.5 SL-301-SA5B-SS-0.0-0.5)	ANTIMONY	40	20	75.00-125.00	56 (20.00)	ANTIMONY	J(all detects) R(all non-detects)
SL-071-SA5B-SS-0.0-0.5MS **SL-071-SA5B-SS-0.0-0.5MSD** (DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 SL-086-SA5B-SS-0.0-0.5 SL-089-SA5B-SS-0.0-0.5 SL-092-SA5B-SS-0.0-0.5 SL-103-SA5B-SS-0.0-0.5 SL-139-SA5B-SS-0.0-0.5 SL-236-SA5B-SS-0.0-0.5 SL-301-SA5B-SS-0.0-0.5)	MOLYBDENUM	134	134	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-071-SA5B-SS-0.0-0.5MS **SL-071-SA5B-SS-0.0-0.5MSD** (DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 SL-086-SA5B-SS-0.0-0.5 SL-089-SA5B-SS-0.0-0.5 SL-092-SA5B-SS-0.0-0.5 SL-103-SA5B-SS-0.0-0.5 SL-139-SA5B-SS-0.0-0.5 SL-236-SA5B-SS-0.0-0.5 SL-301-SA5B-SS-0.0-0.5)	BARIUM	313	247	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-071-SA5B-SS-0.0-0.5MS	ALUMINUM	1507	1477	75.00-125.00	-	ALUMINUM	
SL-071-SA5B-SS-0.0-0.5MSD	CALCIUM	167	189	75.00-125.00	-	CALCIUM	
(DUP04-SA5B-QC-121310	IRON	1042	1161	75.00-125.00	-	IRON	
SED-029-SIV-SD-0.0-0.5	MAGNESIUM	265	220	75.00-125.00	-	MAGNESIUM	
SED-030-SIV-SD-0.0-0.5	MANGANESE	149	139	75.00-125.00	-	MANGANESE	
SED-031-SIV-SD-0.0-0.5							
SED-040-SIV-SD-0.0-0.5							
SL-071-SA5B-SS-0.0-0.5							
SL-072-SA5B-SS-0.0-0.5							
SL-073-SA5B-SS-0.0-0.5							
SL-074-SA5B-SS-0.0-0.5							No Qual, >4x
SL-076-SA5B-SS-0.0-0.5							
SL-078-SA5B-SS-0.0-0.5							
SL-083-SA5B-SS-0.0-0.5							
SL-084-SA5B-SS-0.0-0.5							
SL-086-SA5B-SS-0.0-0.5							
SL-089-SA5B-SS-0.0-0.5							
SL-092-SA5B-SS-0.0-0.5							
SL-103-SA5B-SS-0.0-0.5							
SL-139-SA5B-SS-0.0-0.5							
SL-301-SA5B-SS-0.0-0.5)							
SL-071-SA5B-SS-0.0-0.5MS	TITANIUM	445	352	75.00-125.00	-	TITANIUM	
SL-071-SA5B-SS-0.0-0.5MSD							
(DUP04-SA5B-QC-121310							
SED-029-SIV-SD-0.0-0.5							
SED-030-SIV-SD-0.0-0.5							
SED-031-SIV-SD-0.0-0.5							
SED-040-SIV-SD-0.0-0.5							
SL-071-SA5B-SS-0.0-0.5							
SL-072-SA5B-SS-0.0-0.5							
SL-073-SA5B-SS-0.0-0.5							
SL-074-SA5B-SS-0.0-0.5							No Qual, >4x
SL-076-SA5B-SS-0.0-0.5							
SL-078-SA5B-SS-0.0-0.5							
SL-083-SA5B-SS-0.0-0.5							
SL-084-SA5B-SS-0.0-0.5							
SL-086-SA5B-SS-0.0-0.5							
SL-089-SA5B-SS-0.0-0.5							
SL-092-SA5B-SS-0.0-0.5							
SL-103-SA5B-SS-0.0-0.5							
SL-139-SA5B-SS-0.0-0.5							
SL-301-SA5B-SS-0.0-0.5)							

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-071-SA5B-SS-0.0-0.5DUP (SL-071-SA5B-SS-0.0-0.5 SL -072-SA5B-SS-0.0-0.5 SL -073-SA5B-SS-0.0-0.5 SL -074-SA5B-SS-0.0-0.5 SL -076-SA5B-SS-0.0-0.5 SL -078-SA5B-SS-0.0-0.5 SL -083-SA5B-SS-0.0-0.5 SL -084-SA5B-SS-0.0-0.5 SL -139-SA5B-SS-0.0-0.5 SL -301-SA5B-SS-0.0-0.5)	FLUORIDE	24	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-071-SA5B-SS-0.0-0.5DUP (DUP04-SA5B-QC-121310 SED -029-SIV-SD-0.0-0.5 SED -030-SIV-SD-0.0-0.5 SED -031-SIV-SD-0.0-0.5 SED -040-SIV-SD-0.0-0.5 SL -071-SA5B-SS-0.0-0.5 SL -072-SA5B-SS-0.0-0.5 SL -073-SA5B-SS-0.0-0.5 SL -074-SA5B-SS-0.0-0.5 SL -076-SA5B-SS-0.0-0.5 SL -078-SA5B-SS-0.0-0.5 SL -083-SA5B-SS-0.0-0.5 SL -084-SA5B-SS-0.0-0.5 SL -086-SA5B-SS-0.0-0.5 SL -089-SA5B-SS-0.0-0.5 SL -092-SA5B-SS-0.0-0.5 SL -103-SA5B-SS-0.0-0.5 SL -139-SA5B-SS-0.0-0.5 SL -301-SA5B-SS-0.0-0.5)	Zirconium	52	20.00	No Qual OK by difference

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-071-SA5B-SS-0.0-0.5DUP	ANTIMONY	200	20.00	
(DUP04-SA5B-QC-121310	ARSENIC	23	20.00	
SED -029-SIV-SD-0.0-0.5	BARIUM	28	20.00	
SED -030-SIV-SD-0.0-0.5	BERYLLIUM	43	20.00	
SED -031-SIV-SD-0.0-0.5	CADMIUM	25	20.00	
SED -040-SIV-SD-0.0-0.5	COBALT	22	20.00	
SL -071-SA5B-SS-0.0-0.5	COPPER	33	20.00	
SL -072-SA5B-SS-0.0-0.5	LEAD	37	20.00	
SL -073-SA5B-SS-0.0-0.5	NICKEL	31	20.00	
SL -074-SA5B-SS-0.0-0.5	SILVER	47	20.00	
SL -076-SA5B-SS-0.0-0.5				J(all detects) UJ(all non-detects)
SL -078-SA5B-SS-0.0-0.5				
SL -083-SA5B-SS-0.0-0.5				Sb, Cd, Ag
SL -084-SA5B-SS-0.0-0.5				No Qual
SL -086-SA5B-SS-0.0-0.5				OK by difference
SL -089-SA5B-SS-0.0-0.5				
SL -092-SA5B-SS-0.0-0.5				
SL -103-SA5B-SS-0.0-0.5				
SL -139-SA5B-SS-0.0-0.5				
SL -236-SA5B-SS-0.0-0.5				
SL -301-SA5B-SS-0.0-0.5)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-071-SA5B-SS-0.0-0.5DUP	HEXAVALENT CHROMIUM	200	20.00	
(DUP04-SA5B-QC-121310				
SED -029-SIV-SD-0.0-0.5				
SED -030-SIV-SD-0.0-0.5				
SED -031-SIV-SD-0.0-0.5				
SED -040-SIV-SD-0.0-0.5				
SL -071-SA5B-SS-0.0-0.5				
SL -072-SA5B-SS-0.0-0.5				
SL -073-SA5B-SS-0.0-0.5				
SL -074-SA5B-SS-0.0-0.5				No Qual
SL -076-SA5B-SS-0.0-0.5				OK by difference
SL -078-SA5B-SS-0.0-0.5				
SL -083-SA5B-SS-0.0-0.5				
SL -084-SA5B-SS-0.0-0.5				
SL -086-SA5B-SS-0.0-0.5				
SL -089-SA5B-SS-0.0-0.5				
SL -092-SA5B-SS-0.0-0.5				
SL -103-SA5B-SS-0.0-0.5				
SL -139-SA5B-SS-0.0-0.5				
SL -236-SA5B-SS-0.0-0.5				
SL -301-SA5B-SS-0.0-0.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 6850
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSQ241847A (SL-071-SA5B-SS-0.0-0.5 SL -236-SA5B-SS-0.0-0.5)	PERCHLORATE	120	-	85.00-115.00	-	PERCHLORATE	J (all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03510AQ240131A (DUP04 -SA5B-QC-121310 SED -029-SIV-SD-0.0-0.5 SED -030-SIV-SD-0.0-0.5 SED -031-SIV-SD-0.0-0.5 SED -040-SIV-SD-0.0-0.5 SL -071-SA5B-SS-0.0-0.5 SL -072-SA5B-SS-0.0-0.5 SL -073-SA5B-SS-0.0-0.5 SL -074-SA5B-SS-0.0-0.5 SL -076-SA5B-SS-0.0-0.5 SL -078-SA5B-SS-0.0-0.5 SL -083-SA5B-SS-0.0-0.5 SL -084-SA5B-SS-0.0-0.5 SL -086-SA5B-SS-0.0-0.5 SL -089-SA5B-SS-0.0-0.5 SL -092-SA5B-SS-0.0-0.5 SL -103-SA5B-SS-0.0-0.5 SL -139-SA5B-SS-0.0-0.5 SL -236-SA5B-SS-0.0-0.5 SL -301-SA5B-SS-0.0-0.5)	METHOXYCHLOR	130	-	59.00-125.00	-	METHOXYCHLOR	J(all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03511AY241635A (DUP04 -SA5B-QC-121310 SED -029-SIV-SD-0.0-0.5 SED -030-SIV-SD-0.0-0.5 SED -031-SIV-SD-0.0-0.5 SED -040-SIV-SD-0.0-0.5 SL -071-SA5B-SS-0.0-0.5 SL -072-SA5B-SS-0.0-0.5 SL -073-SA5B-SS-0.0-0.5 SL -074-SA5B-SS-0.0-0.5 SL -076-SA5B-SS-0.0-0.5 SL -078-SA5B-SS-0.0-0.5 SL -083-SA5B-SS-0.0-0.5 SL -084-SA5B-SS-0.0-0.5 SL -086-SA5B-SS-0.0-0.5 SL -089-SA5B-SS-0.0-0.5 SL -092-SA5B-SS-0.0-0.5 SL -103-SA5B-SS-0.0-0.5 SL -139-SA5B-SS-0.0-0.5 SL -236-SA5B-SS-0.0-0.5 SL -301-SA5B-SS-0.0-0.5)	Aroclor 5442	-	74	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03557AQ241952A (DUP04 -SA5B -QC-121310 SED -029-SIV-SD-0.0-0.5 SED -030-SIV-SD-0.0-0.5 SED -031-SIV-SD-0.0-0.5 SED -040-SIV-SD-0.0-0.5 SL -071-SA5B -SS-0.0-0.5 SL -072-SA5B -SS-0.0-0.5 SL -073-SA5B -SS-0.0-0.5 SL -074-SA5B -SS-0.0-0.5 SL -076-SA5B -SS-0.0-0.5 SL -078-SA5B -SS-0.0-0.5 SL -083-SA5B -SS-0.0-0.5 SL -084-SA5B -SS-0.0-0.5 SL -086-SA5B -SS-0.0-0.5 SL -089-SA5B -SS-0.0-0.5 SL -092-SA5B -SS-0.0-0.5 SL -103-SA5B -SS-0.0-0.5 SL -139-SA5B -SS-0.0-0.5 SL -236-SA5B -SS-0.0-0.5 SL -301-SA5B -SS-0.0-0.5)	DINOSEB	6	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0LGLCSQ261059 (DUP04 -SA5B -QC-121310 SED -029-SIV-SD-0.0-0.5 SED -030-SIV-SD-0.0-0.5 SED -031-SIV-SD-0.0-0.5 SED -040-SIV-SD-0.0-0.5 SL -071-SA5B -SS-0.0-0.5 SL -072-SA5B -SS-0.0-0.5 SL -073-SA5B -SS-0.0-0.5 SL -074-SA5B -SS-0.0-0.5 SL -076-SA5B -SS-0.0-0.5 SL -078-SA5B -SS-0.0-0.5 SL -083-SA5B -SS-0.0-0.5 SL -084-SA5B -SS-0.0-0.5 SL -086-SA5B -SS-0.0-0.5 SL -089-SA5B -SS-0.0-0.5 SL -092-SA5B -SS-0.0-0.5 SL -103-SA5B -SS-0.0-0.5 SL -139-SA5B -SS-0.0-0.5 SL -236-SA5B -SS-0.0-0.5 SL -301-SA5B -SS-0.0-0.5)	3,3'-DICHLOROBENZIDINE	31	-	38.00-105.00	-	3,3'-DICHLOROBENZIDINE	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P35126BQ220906A (DUP04 -SA5B -QC-121310 SED -029-SIV-SD-0.0-0.5 SED -030-SIV-SD-0.0-0.5 SED -031-SIV-SD-0.0-0.5 SED -040-SIV-SD-0.0-0.5 SL -071-SA5B -SS-0.0-0.5 SL -072-SA5B -SS-0.0-0.5 SL -073-SA5B -SS-0.0-0.5 SL -074-SA5B -SS-0.0-0.5 SL -076-SA5B -SS-0.0-0.5 SL -078-SA5B -SS-0.0-0.5 SL -083-SA5B -SS-0.0-0.5 SL -084-SA5B -SS-0.0-0.5 SL -086-SA5B -SS-0.0-0.5 SL -089-SA5B -SS-0.0-0.5 SL -092-SA5B -SS-0.0-0.5 SL -103-SA5B -SS-0.0-0.5 SL -139-SA5B -SS-0.0-0.5 SL -236-SA5B -SS-0.0-0.5 SL -301-SA5B -SS-0.0-0.5)	ANTIMONY	55	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-139-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	251	20.00-120.00	All Target Analytes	No Qual Diluted Out

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SED-031-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	139	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-072-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	122	45.00-120.00	All Target Analytes	J(all detects)
SL-074-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	131	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-086-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	J(all detects)
SL-089-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	160	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-103-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	128	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-236-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	138	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-301-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	152	45.00-120.00	All Target Analytes	No Qual Diluted Out

Method: 8151A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SED-029-SIV-SD-0.0-0.5	2,4-Dichlorophenylacetic acid	173	36.00-156.00	All Target Analytes	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-071-SA5B-SS-0.0-0.5	DUP04-SA5B-QC-121310			
MOISTURE	6.3	5.9	7		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-071-SA5B-SS-0.0-0.5	DUP04-SA5B-QC-121310			
FLUORIDE	3.4	4.3	23	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-071-SA5B-SS-0.0-0.5	DUP04-SA5B-QC-121310			
ALUMINUM	14400	14200	1	50.00	
BORON	4.15	5.32	25	50.00	
CALCIUM	2980	3040	2	50.00	
IRON	20700	20900	1	50.00	
LITHIUM	23.9	23.4	2	50.00	
MAGNESIUM	4490	4460	1	50.00	
MANGANESE	248	248	0	50.00	
PHOSPHORUS	377	394	4	50.00	No Qualifiers Applied
POTASSIUM	2680	2580	4	50.00	
SODIUM	109	102	7	50.00	
STRONTIUM	16.7	17.2	3	50.00	
TIN	2.40	2.42	1	50.00	
TITANIUM	1130	1150	2	50.00	
Zirconium	1.01	1.10	9	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-071-SA5B-SS-0.0-0.5	DUP04-SA5B-QC-121310			
ANTIMONY	0.102	0.136	29	50.00	
ARSENIC	6.17	7.83	24	50.00	
BARIUM	120	135	12	50.00	
BERYLLIUM	0.693	0.771	11	50.00	
CHROMIUM	25.5	28.8	12	50.00	
COBALT	7.36	9.00	20	50.00	
COPPER	11.9	15.1	24	50.00	
LEAD	9.18	11.3	21	50.00	No Qualifiers Applied
MOLYBDENUM	0.620	0.750	19	50.00	
NICKEL	14.8	17.1	14	50.00	
SELENIUM	0.0935	0.152	48	50.00	
THALLIUM	0.356	0.324	9	50.00	
VANADIUM	44.9	50.3	11	50.00	
ZINC	98.5	128	26	50.00	
CADMIUM	0.210	0.382	58	50.00	J(all detects)
SILVER	0.241	1.22	134	50.00	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-071-SA5B-SS-0.0-0.5	Concentration (mg/Kg) DUP04-SA5B-QC-121310	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	1.1 U	0.76	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-071-SA5B-SS-0.0-0.5	Concentration (mg/Kg) DUP04-SA5B-QC-121310	Sample RPD	eQAPP RPD	Flag
MERCURY	0.334	0.227	38	50.00	No Qualifiers Applied

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-071-SA5B-SS-0.0-0.5	Concentration (ug/Kg) DUP04-SA5B-QC-121310	Sample RPD	eQAPP RPD	Flag
Aroclor 5460	4.3	2.6	49	50.00	No Qualifiers Applied
AROCLOR 1248	6.7	1.8 U	200	50.00	J(all detects) UJ(all non-detects)
AROCLOR 1254	13	2.1	144	50.00	
AROCLOR 1260	8.5	3.9	74	50.00	

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-071-SA5B-SS-0.0-0.5	Concentration (ug/Kg) DUP04-SA5B-QC-121310	Sample RPD	eQAPP RPD	Flag
2-METHYLNAPHTHALENE	0.74	0.87	16	50.00	No Qualifiers Applied
1-METHYLNAPHTHALENE	1.8 U	0.74	200	50.00	J(all detects) UJ(all non-detects)
ACENAPHTHYLENE	18	0.75	184	50.00	
ANTHRACENE	6.9	1.6	125	50.00	
DIBENZO(A,H)ANTHRACENE	55	2.6	182	50.00	
Di-n-butylphthalate	19 U	6.7	200	50.00	
NAPHTHALENE	3.3	1.1	100	50.00	

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg) SL-071-SA5B-SS-0.0-0.5	Concentration (ug/Kg) DUP04-SA5B-QC-121310	Sample RPD	eQAPP RPD	Flag
BIS(2-ETHYLHEXYL)PHTHALATE	360 U	29	200	50.00	J(all detects) UJ(all non-detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit) SL-071-SA5B-SS-0.0-0.5	Concentration (pH unit) DUP04-SA5B-QC-121310	Sample RPD	eQAPP RPD	Flag
PH	7.67	7.34	4	50.00	No Qualifiers Applied

Field Duplicate RPD Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-071-SA5B-SS-0.0-0.5	DUP04-SA5B-QC-121310			
Oxidation Reduction Potential	462	454	2		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-073-SA5B-SS-0.0-0.5	FLUORIDE	J	0.87	1.1	PQL	mg/Kg	J (all detects)

Method: 314.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-086-SA5B-SS-0.0-0.5	PERCHLORATE	J	11.8	31.8	PQL	ug/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA5B-QC-121310	SODIUM	J	102	106	PQL	mg/Kg	J (all detects)
	TIN	J	2.42	10.6	PQL	mg/Kg	
	Zirconium	J	1.10	5.31	PQL	mg/Kg	
SED-029-SIV-SD-0.0-0.5	BORON	J	4.76	5.32	PQL	mg/Kg	J (all detects)
	SODIUM	J	86.8	106	PQL	mg/Kg	
	TIN	J	2.05	10.6	PQL	mg/Kg	
SED-030-SIV-SD-0.0-0.5	SODIUM	J	78.9	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.34	11.5	PQL	mg/Kg	
	Zirconium	J	1.44	5.74	PQL	mg/Kg	
SED-031-SIV-SD-0.0-0.5	SODIUM	J	54.3	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.03	10.7	PQL	mg/Kg	
	Zirconium	J	0.920	5.34	PQL	mg/Kg	
SED-040-SIV-SD-0.0-0.5	BORON	J	5.27	5.35	PQL	mg/Kg	J (all detects)
	SODIUM	J	62.3	107	PQL	mg/Kg	
	TIN	J	1.82	10.7	PQL	mg/Kg	
	Zirconium	J	1.05	5.35	PQL	mg/Kg	
SL-071-SA5B-SS-0.0-0.5	BORON	J	4.15	5.23	PQL	mg/Kg	J (all detects)
	TIN	J	2.40	10.5	PQL	mg/Kg	
	Zirconium	J	1.01	5.23	PQL	mg/Kg	
SL-072-SA5B-SS-0.0-0.5	SODIUM	J	98.9	101	PQL	mg/Kg	J (all detects)
	TIN	J	2.20	10.1	PQL	mg/Kg	
	Zirconium	J	1.32	5.03	PQL	mg/Kg	
SL-073-SA5B-SS-0.0-0.5	BORON	J	4.90	5.05	PQL	mg/Kg	J (all detects)
	SODIUM	J	87.5	101	PQL	mg/Kg	
	TIN	J	2.03	10.1	PQL	mg/Kg	
	Zirconium	J	1.75	5.05	PQL	mg/Kg	
SL-074-SA5B-SS-0.0-0.5	BORON	J	4.88	5.19	PQL	mg/Kg	J (all detects)
	TIN	J	2.34	10.4	PQL	mg/Kg	
	Zirconium	J	1.49	5.19	PQL	mg/Kg	
SL-076-SA5B-SS-0.0-0.5	BORON	J	2.78	5.26	PQL	mg/Kg	J (all detects)
	TIN	J	2.39	10.5	PQL	mg/Kg	
SL-078-SA5B-SS-0.0-0.5	BORON	J	3.77	5.30	PQL	mg/Kg	J (all detects)
	TIN	J	2.09	10.6	PQL	mg/Kg	
	Zirconium	J	1.26	5.30	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 | Laboratory: LL

EDD Filename: DE036_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-083-SA5B-SS-0.0-0.5	BORON	J	4.46	5.16	PQL	mg/Kg	J (all detects)
	SODIUM	J	95.9	103	PQL	mg/Kg	
	TIN	J	2.24	10.3	PQL	mg/Kg	
	Zirconium	J	1.82	5.16	PQL	mg/Kg	
SL-084-SA5B-SS-0.0-0.5	BORON	J	3.91	5.42	PQL	mg/Kg	J (all detects)
	SODIUM	J	86.4	108	PQL	mg/Kg	
	TIN	J	2.45	10.8	PQL	mg/Kg	
	Zirconium	J	1.39	5.42	PQL	mg/Kg	
SL-086-SA5B-SS-0.0-0.5	SODIUM	J	71.0	103	PQL	mg/Kg	J (all detects)
	TIN	J	1.98	10.3	PQL	mg/Kg	
	Zirconium	J	1.95	5.15	PQL	mg/Kg	
SL-089-SA5B-SS-0.0-0.5	TIN	J	2.20	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.43	5.20	PQL	mg/Kg	
SL-092-SA5B-SS-0.0-0.5	TIN	J	2.05	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.79	5.57	PQL	mg/Kg	
SL-103-SA5B-SS-0.0-0.5	TIN	J	2.33	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.02	5.47	PQL	mg/Kg	
SL-139-SA5B-SS-0.0-0.5	TIN	J	2.72	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.64	5.58	PQL	mg/Kg	
SL-236-SA5B-SS-0.0-0.5	TIN	J	2.25	10.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.19	5.26	PQL	mg/Kg	
SL-301-SA5B-SS-0.0-0.5	BORON	J	4.44	5.32	PQL	mg/Kg	J (all detects)
	TIN	J	3.24	10.6	PQL	mg/Kg	
	Zirconium	J	1.67	5.32	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA5B-QC-121310	ANTIMONY	J	0.136	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.152	0.417	PQL	mg/Kg	
SED-029-SIV-SD-0.0-0.5	ANTIMONY	J	0.191	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.144	0.434	PQL	mg/Kg	
SED-030-SIV-SD-0.0-0.5	ANTIMONY	J	0.115	0.239	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.209	0.478	PQL	mg/Kg	
	SILVER	J	0.0806	0.119	PQL	mg/Kg	
SED-031-SIV-SD-0.0-0.5	SELENIUM	J	0.151	0.440	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0557	0.110	PQL	mg/Kg	
SED-040-SIV-SD-0.0-0.5	SELENIUM	J	0.129	0.436	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0217	0.109	PQL	mg/Kg	
SL-071-SA5B-SS-0.0-0.5	ANTIMONY	J	0.102	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0935	0.423	PQL	mg/Kg	
SL-072-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0917	0.203	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.114	0.406	PQL	mg/Kg	
SL-073-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0768	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.138	0.412	PQL	mg/Kg	
SL-074-SA5B-SS-0.0-0.5	SELENIUM	J	0.315	0.431	PQL	mg/Kg	J (all detects)
SL-076-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0842	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.133	0.425	PQL	mg/Kg	
	SILVER	J	0.0363	0.106	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 | Laboratory: LL

EDD Filename: DE036_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-078-SA5B-SS-0.0-0.5	ANTIMONY SELENIUM	J J	0.149 0.179	0.216 0.432	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-083-SA5B-SS-0.0-0.5	SELENIUM	J	0.176	0.421	PQL	mg/Kg	J (all detects)
SL-084-SA5B-SS-0.0-0.5	SELENIUM SILVER	J J	0.203 0.0361	0.438 0.109	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-086-SA5B-SS-0.0-0.5	SELENIUM SILVER	J J	0.140 0.0435	0.420 0.105	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-089-SA5B-SS-0.0-0.5	SELENIUM SILVER	J J	0.123 0.0831	0.424 0.106	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-092-SA5B-SS-0.0-0.5	ANTIMONY SELENIUM SILVER	J J J	0.0680 0.320 0.0392	0.223 0.446 0.111	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-103-SA5B-SS-0.0-0.5	ANTIMONY SELENIUM SILVER	J J J	0.0708 0.273 0.0321	0.223 0.446 0.111	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-139-SA5B-SS-0.0-0.5	SELENIUM SILVER	J J	0.152 0.0876	0.438 0.110	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-236-SA5B-SS-0.0-0.5	ANTIMONY SELENIUM SILVER	J J J	0.152 0.160 0.0265	0.208 0.417 0.104	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-301-SA5B-SS-0.0-0.5	ANTIMONY SELENIUM	J J	0.120 0.164	0.211 0.422	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA5B-QC-121310	HEXAVALENT CHROMIUM	J	0.76	1.1	PQL	mg/Kg	J (all detects)
SED-030-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.70	1.2	PQL	mg/Kg	J (all detects)
SED-040-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-072-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)
SL-073-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-074-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.51	1.1	PQL	mg/Kg	J (all detects)
SL-078-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.86	1.1	PQL	mg/Kg	J (all detects)
SL-083-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.91	1.1	PQL	mg/Kg	J (all detects)
SL-084-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.41	1.1	PQL	mg/Kg	J (all detects)
SL-086-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-089-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.58	1.1	PQL	mg/Kg	J (all detects)
SL-092-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)
SL-139-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.59	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-029-SIV-SD-0.0-0.5	MERCURY	J	0.0380	0.110	PQL	mg/Kg	J (all detects)
SED-030-SIV-SD-0.0-0.5	MERCURY	J	0.0222	0.113	PQL	mg/Kg	J (all detects)
SED-031-SIV-SD-0.0-0.5	MERCURY	J	0.0049	0.105	PQL	mg/Kg	J (all detects)
SED-040-SIV-SD-0.0-0.5	MERCURY	J	0.0039	0.107	PQL	mg/Kg	J (all detects)
SL-072-SA5B-SS-0.0-0.5	MERCURY	J	0.0873	0.100	PQL	mg/Kg	J (all detects)
SL-073-SA5B-SS-0.0-0.5	MERCURY	J	0.0132	0.0993	PQL	mg/Kg	J (all detects)
SL-074-SA5B-SS-0.0-0.5	MERCURY	J	0.0204	0.104	PQL	mg/Kg	J (all detects)
SL-076-SA5B-SS-0.0-0.5	MERCURY	J	0.0066	0.101	PQL	mg/Kg	J (all detects)
SL-078-SA5B-SS-0.0-0.5	MERCURY	J	0.0142	0.108	PQL	mg/Kg	J (all detects)
SL-083-SA5B-SS-0.0-0.5	MERCURY	J	0.0414	0.101	PQL	mg/Kg	J (all detects)
SL-084-SA5B-SS-0.0-0.5	MERCURY	J	0.0086	0.106	PQL	mg/Kg	J (all detects)
SL-086-SA5B-SS-0.0-0.5	MERCURY	J	0.0098	0.101	PQL	mg/Kg	J (all detects)
SL-236-SA5B-SS-0.0-0.5	MERCURY	J	0.0341	0.0993	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-029-SIV-SD-0.0-0.5	ALPHA-BHC	J	0.29	0.92	PQL	ug/Kg	J (all detects)
SL-074-SA5B-SS-0.0-0.5	BETA-BHC	J	0.74	0.90	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA5B-QC-121310	Aroclor 5460	J	2.6	3.5	PQL	ug/Kg	J (all detects)
SED-030-SIV-SD-0.0-0.5	Aroclor 5460	J	6.7	7.9	PQL	ug/Kg	J (all detects)
SED-031-SIV-SD-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	8.4 5.3 9.3	9.4 9.4 18	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-074-SA5B-SS-0.0-0.5	AROCLOR 1248 AROCLOR 1254 Aroclor 5460	J J J	4.5 4.8 8.9	9.3 9.3 18	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-078-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.7 1.1	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-086-SA5B-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.7 1.7	1.8 3.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-089-SA5B-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	6.6 6.6	9.1 18	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-030-SIV-SD-0.0-0.5	2,4-D	J	3.0	4.3	PQL	ug/Kg	J (all detects)
	DICAMBA	J	0.78	1.4	PQL	ug/Kg	
SED-031-SIV-SD-0.0-0.5	DICAMBA	J	0.69	1.3	PQL	ug/Kg	J (all detects)
SL-072-SA5B-SS-0.0-0.5	2,4-D	J	1.4	3.8	PQL	ug/Kg	J (all detects)
SL-074-SA5B-SS-0.0-0.5	2,4-D	J	1.9	3.9	PQL	ug/Kg	J (all detects)
	MCPA	J	230	270	PQL	ug/Kg	
SL-076-SA5B-SS-0.0-0.5	MCPP	J	130	270	PQL	ug/Kg	J (all detects)
SL-084-SA5B-SS-0.0-0.5	MCPA	J	250	270	PQL	ug/Kg	J (all detects)
SL-089-SA5B-SS-0.0-0.5	2,4,5-T	J	0.088	0.18	PQL	ug/Kg	J (all detects)
SL-236-SA5B-SS-0.0-0.5	DICAMBA	J	0.45	1.3	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA5B-QC-121310	BENZO(A)ANTHRACENE	J	30	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	33	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	60	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	33	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	24	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	350	PQL	ug/Kg	
	CHRYSENE	J	46	180	PQL	ug/Kg	
	FLUORANTHENE	J	64	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	27	180	PQL	ug/Kg	
	PHENANTHRENE	J	23	180	PQL	ug/Kg	
	PYRENE	J	70	180	PQL	ug/Kg	
SED-029-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	110	370	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	31	180	PQL	ug/Kg	
SED-030-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	56	400	PQL	ug/Kg	J (all detects)
SED-031-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	370	PQL	ug/Kg	J (all detects)
SL-072-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	39	350	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	20	180	PQL	ug/Kg	
	PYRENE	J	25	180	PQL	ug/Kg	
SL-074-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	41	360	PQL	ug/Kg	J (all detects)
SL-076-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	350	PQL	ug/Kg	J (all detects)
	PYRENE	J	18	180	PQL	ug/Kg	
SL-084-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	360	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	22	180	PQL	ug/Kg	
	PYRENE	J	23	180	PQL	ug/Kg	
SL-089-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	330	360	PQL	ug/Kg	J (all detects)
SL-236-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	350	PQL	ug/Kg	J (all detects)
SL-301-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	22	180	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	29	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	18	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	370	PQL	ug/Kg	
	PYRENE	J	21	180	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA5B-QC-121310	1-METHYLNAPHTHALENE	J	0.74	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.87	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.75	1.8	PQL	ug/Kg	
	ANTHRACENE	J	1.6	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	6.7	19	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	
SED-029-SIV-SD-0.0-0.5	ANTHRACENE	J	4.4	18	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	9.6	18	PQL	ug/Kg	
	BENZO(A)PYRENE	J	9.6	18	PQL	ug/Kg	
	Di-n-octylphthalate	J	97	200	PQL	ug/Kg	
SED-030-SIV-SD-0.0-0.5	CHRYSENE	J	1.6	2.0	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	7.3	22	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	0.83	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	0.89	2.0	PQL	ug/Kg	
	PYRENE	J	1.2	2.0	PQL	ug/Kg	
SED-031-SIV-SD-0.0-0.5	ANTHRACENE	J	0.43	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.99	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.1	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.85	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.2	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	13	20	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	1.9	PQL	ug/Kg	
SED-040-SIV-SD-0.0-0.5	ANTHRACENE	J	0.38	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.84	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.79	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.73	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	
SL-071-SA5B-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.74	1.8	PQL	ug/Kg	J (all detects)
SL-072-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.62	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.96	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.96	1.8	PQL	ug/Kg	
SL-073-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	13	18	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	16	18	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	12	18	PQL	ug/Kg	
	PYRENE	J	17	18	PQL	ug/Kg	
SL-074-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	ACENAPHTHENE	J	1.5	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.58	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.0	20	PQL	ug/Kg	
	FLUORENE	J	0.80	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.7	1.8	PQL	ug/Kg	
SL-078-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	9.7	18	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	11	18	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	16	18	PQL	ug/Kg	
	CHRYSENE	J	17	18	PQL	ug/Kg	
	FLUORANTHENE	J	16	18	PQL	ug/Kg	
	PYRENE	J	13	18	PQL	ug/Kg	
SL-083-SA5B-SS-0.0-0.5	ACENAPHTHENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	8.3	20	PQL	ug/Kg	
	NAPHTHALENE	J	0.78	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-084-SA5B-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	1.5	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.78	1.8	PQL	ug/Kg	
SL-086-SA5B-SS-0.0-0.5	CHRYSENE	J	0.45	1.8	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.89	1.8	PQL	ug/Kg	
SL-089-SA5B-SS-0.0-0.5	DIBENZO(A,H)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	10	19	PQL	ug/Kg	
SL-092-SA5B-SS-0.0-0.5	NAPHTHALENE	J	0.78	1.9	PQL	ug/Kg	J (all detects)
SL-103-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	0.88	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.7	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.96	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.91	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	1.9	PQL	ug/Kg	
SL-139-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.89	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.0	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.96	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.6	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.9	PQL	ug/Kg	
SL-236-SA5B-SS-0.0-0.5	DIBENZO(A,H)ANTHRACENE	J	1.7	1.8	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	6.4	19	PQL	ug/Kg	
	Di-n-octylphthalate	J	11	19	PQL	ug/Kg	
	FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.6	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
SL-301-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.5	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.40	1.8	PQL	ug/Kg	
	ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.7	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.4	20	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.8	PQL	ug/Kg	

LDC #: 25337H4 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/5/11
SDG #: DE036 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CR
2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	ICB/CCB hits - No Qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, V, Zn 4x)
VII.	Duplicate Sample Analysis	N	D (Sb, Cd, Ag, Zr 2SxRL)
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Ba (12% J/UJ/A)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-078-SA5B-SS-0.0-0.5	11	DUP04-SA5B-QC-121310 D	21	SL-071-SA5B-SS-0.0-0.5MS	31	
2	SL-084-SA5B-SS-0.0-0.5	12	SED-029-SIV-SD-0.0-0.5	22	SL-071-SA5B-SS-0.0-0.5MSD	32	
3	SL-076-SA5B-SS-0.0-0.5	13	SED-031-SIV-SD-0.0-0.5	23	SL-071-SA5B-SS-0.0-0.5DUP	33	
4	SL-074-SA5B-SS-0.0-0.5	14	SED-030-SIV-SD-0.0-0.5	24		34	
5	SL-139-SA5B-SS-0.0-0.5	15	SED-040-SIV-SD-0.0-0.5	25		35	
6	SL-083-SA5B-SS-0.0-0.5	16	SL-086-SA5B-SS-0.0-0.5	26		36	
7	SL-074-SA5B-SS-0.0-0.5	17	SL-092-SA5B-SS-0.0-0.5	27		37	
8	SL-301-SA5B-SS-0.0-0.5	18	SL-103-SA5B-SS-0.0-0.5	28		38	
9	SL-073-SA5B-SS-0.0-0.5	19	SL-089-SA5B-SS-0.0-0.5	29		39	
10	SL-072-SA5B-SS-0.0-0.5	20	SL-236-SA5B-SS-0.0-0.5	30		40	

Notes: DUP04 & SL-071

SAMPLE DELIVERY GROUP

DE037

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3050B	6010B	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3050B	6020	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3060A	7199	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3550B	8081A	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3550B	8082	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3550B	8151A	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3550B	8270C	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3550B	8270C SIM	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	Gen Prep	9045M	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	METHOD	300.0	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	METHOD	314.0	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	METHOD	7471A	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5MSD	P163878M240238A	MSD	3550B	8151A	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5MS	P163878R240210A	MS	3550B	8151A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3050B	6010B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3050B	6020	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3060A	7199	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3546	1625C	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3550B	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3550B	8082	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3550B	8270C	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3550B	8270C SIM	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	5035	8015M	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	5035	8260B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	5035	8260B SIM	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	8330	8330A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	Gen Prep	9045M	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	METHOD	300.0	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	METHOD	314.0	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	METHOD	7471A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	METHOD	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	METHOD	8315A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	METHOD	9012B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3050B	6010B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3050B	6020	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3060A	7199	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3546	1625C	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3550B	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3550B	8082	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3550B	8270C	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3550B	8270C SIM	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	5035	8015M	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	5035	8260B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	5035	8260B SIM	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	8330	8330A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	METHOD	300.0	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	METHOD	314.0	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	METHOD	7471A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	METHOD	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	METHOD	8315A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	METHOD	9012B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	3050B	6020	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	3546	1625C	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	3550B	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	3550B	8082	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	3550B	8270C	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	3550B	8270C SIM	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	5035	8015M	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	5035	8260B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	5035	8260B SIM	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	8330	8330A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	METHOD	7471A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	METHOD	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	METHOD	8315A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	3050B	6010B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	3050B	6020	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	3060A	7199	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	Gen Prep	9045M	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	METHOD	300.0	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	METHOD	314.0	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	METHOD	7471A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	METHOD	9012B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	P163871M321933A	MSD	METHOD	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	P163871R321904A	MS	METHOD	8015B	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3050B	6010B	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3050B	6020	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3546	1625C	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3550B	8015B	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3550B	8082	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3550B	8270C	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3550B	8270C SIM	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	5035	8015M	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	5035	8260B	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	5035	8260B SIM	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	8330	8330A	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	Gen Prep	9045M	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	METHOD	300.0	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	METHOD	314.0	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	METHOD	7471A	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	METHOD	8015B	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	METHOD	8315A	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	METHOD	9012B	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3050B	6010B	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3050B	6020	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3060A	7199	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3550B	8081A	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3550B	8082	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3550B	8151A	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3550B	8270C	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3550B	8270C SIM	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	Gen Prep	9045M	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	METHOD	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	METHOD	314.0	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	METHOD	6850	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	METHOD	7471A	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3050B	6010B	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3050B	6020	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3060A	7199	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3546	1625C	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3550B	8015B	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3550B	8082	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3550B	8270C	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3550B	8270C SIM	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	5035	8015M	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	5035	8260B	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	5035	8260B SIM	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	8330	8330A	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	Gen Prep	9045M	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	METHOD	300.0	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	METHOD	314.0	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	METHOD	7471A	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	METHOD	8015B	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	METHOD	8315A	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	METHOD	9012B	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3050B	6010B	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3050B	6020	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3060A	7199	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3546	1625C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3550B	8015B	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3550B	8082	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3550B	8270C	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3550B	8270C SIM	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	5035	8015M	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	5035	8260B	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	5035	8260B SIM	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	8330	8330A	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	Gen Prep	9045M	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	METHOD	300.0	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	METHOD	314.0	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	METHOD	7471A	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	METHOD	8015B	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	METHOD	8315A	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	METHOD	9012B	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3050B	6010B	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3050B	6020	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3060A	7199	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3546	1625C	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3550B	8015B	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3550B	8082	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3550B	8270C	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3550B	8270C SIM	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	5035	8015M	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	5035	8260B	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	5035	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	8330	8330A	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	Gen Prep	9045M	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	METHOD	300.0	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	METHOD	314.0	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	METHOD	7471A	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	METHOD	8015B	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	METHOD	8315A	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	METHOD	9012B	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	3005A	6010B	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	3020A	6020	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	3510C	8081A	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	3510C	8082	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	3510C	8270C	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	3510C	8270C SIM	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	5030B	8260B	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	5030B	8260B SIM	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	Gen Prep	300.0	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	Gen Prep	314.0	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	Gen Prep	7199	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	Gen Prep	9040B	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	METHOD	7470A	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	METHOD	8151A	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3050B	6010B	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3050B	6020	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3060A	7199	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3550B	8081A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3550B	8082	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3550B	8151A	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3550B	8270C	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3550B	8270C SIM	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	Gen Prep	9045M	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	METHOD	300.0	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	METHOD	314.0	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	METHOD	7471A	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3050B	6010B	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3050B	6020	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3060A	7199	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3546	1625C	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3550B	8015B	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3550B	8081A	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3550B	8082	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3550B	8151A	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3550B	8270C	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3550B	8270C SIM	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	5035	8015M	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	5035	8260B	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	5035	8260B SIM	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	8330	8330A	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	Gen Prep	9045M	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	METHOD	300.0	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	METHOD	314.0	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	METHOD	8015B	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	METHOD	8315A	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	METHOD	9012B	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5MSD	P163880M322326A	MSD	METHOD	8015B	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5MS	P163880R322312A	MS	METHOD	8015B	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3050B	6010B	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3050B	6020	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3060A	7199	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3546	1625C	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3550B	8015B	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3550B	8082	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3550B	8270C	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3550B	8270C SIM	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	5035	8015M	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	5035	8260B	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	5035	8260B SIM	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	8330	8330A	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	Gen Prep	9045M	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	300.0	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	314.0	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	6850	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	7471A	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	8015B	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	8315A	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	9012B	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3050B	6020	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3060A	7199	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3550B	8081A	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3550B	8082	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3550B	8151A	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3550B	8270C	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3550B	8270C SIM	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	Gen Prep	9045M	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	METHOD	300.0	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	METHOD	314.0	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	METHOD	7471A	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3050B	6010B	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3050B	6020	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3060A	7199	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3550B	8081A	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3550B	8082	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3550B	8151A	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3550B	8270C	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3550B	8270C SIM	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	Gen Prep	9045M	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	METHOD	300.0	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	METHOD	314.0	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	METHOD	6850	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	METHOD	7471A	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3050B	6010B	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3060A	7199	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3550B	8081A	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3550B	8082	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3550B	8151A	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3550B	8270C	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3550B	8270C SIM	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	Gen Prep	9045M	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	METHOD	300.0	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	METHOD	314.0	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	METHOD	7471A	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5DUP	P163883D270644B	DUP	METHOD	314.0	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5DUP	P163883D271735B	DUP	METHOD	300.0	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5MS	P163883R270708B	MS	METHOD	314.0	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5MS	P163883R271749B	MS	METHOD	300.0	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3050B	6010B	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3050B	6020	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3060A	7199	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3550B	8081A	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3550B	8082	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3550B	8151A	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3550B	8270C	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3550B	8270C SIM	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	Gen Prep	9045M	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	METHOD	300.0	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	METHOD	314.0	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3050B	6010B	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3050B	6020	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3060A	7199	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3546	1625C	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3550B	8015B	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3550B	8082	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3550B	8270C	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3550B	8270C SIM	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	5035	8015M	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	5035	8260B	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	5035	8260B SIM	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	8330	8330A	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	Gen Prep	9045M	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	METHOD	300.0	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	METHOD	314.0	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	METHOD	7471A	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	METHOD	8015B	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	METHOD	8315A	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	METHOD	9012B	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0DUP	P163885D272017A	DUP	METHOD	9012B	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0MS	P163885R272021A	MS	METHOD	9012B	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3050B	6010B	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3050B	6020	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3060A	7199	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3546	1625C	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3550B	8082	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3550B	8270C	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3550B	8270C SIM	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	5035	8015M	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	5035	8260B	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	5035	8260B SIM	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	8330	8330A	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	Gen Prep	9045M	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	METHOD	300.0	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	METHOD	314.0	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	METHOD	7471A	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	METHOD	8015B	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	METHOD	8315A	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: EM **Method:** 9040B **Matrix:** AQ

Sample ID: EB15-SA5B-121310 *Collected:* 12/13/2010 12:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PH	5.2		0.010	MDL	0.010	PQL	pH unit	J	H

Method Category: GENCHEM **Method:** 300.0 **Matrix:** SO

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	16.8		0.92	MDL	1.7	PQL	mg/Kg	J	Q

Sample ID: SED-033-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 3:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.90	J	0.85	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 4:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.2	J	0.86	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-006-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	13.0		0.90	MDL	1.7	PQL	mg/Kg	J	Q

Sample ID: SL-006-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 9:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.9		0.87	MDL	1.6	PQL	mg/Kg	J	Q

Sample ID: SL-007-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	8.0		0.87	MDL	1.6	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-007-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.2	J	0.88	MDL	1.7	PQL	mg/Kg	J	Z, Q

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	0.98	J	0.86	MDL	1.6	PQL	mg/Kg	J	Z, Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.54	J	1.00	MDL	5.62	PQL	mg/Kg	J	Z
PHOSPHORUS	397		0.630	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	3800		20.2	MDL	56.2	PQL	mg/Kg	J	Q
TIN	2.94	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	4.82	J	0.944	MDL	5.62	PQL	mg/Kg	J	Z

Sample ID: SED-032-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 2:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.97	J	0.998	MDL	5.61	PQL	mg/Kg	J	Z
PHOSPHORUS	386		0.628	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	2790		20.2	MDL	56.1	PQL	mg/Kg	J	Q
SODIUM	78.8	J	41.8	MDL	112	PQL	mg/Kg	J	Z
TIN	2.66	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.22	J	0.942	MDL	5.61	PQL	mg/Kg	J	Z

Sample ID: SED-033-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 3:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.23	J	0.908	MDL	5.10	PQL	mg/Kg	J	Z
PHOSPHORUS	267		0.572	MDL	10.2	PQL	mg/Kg	J	Q
POTASSIUM	1810		18.4	MDL	51.0	PQL	mg/Kg	J	Q
SODIUM	64.8	J	38.1	MDL	102	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SED-033-SIV-SD-0.0-0.5 ***Collected:*** 12/13/2010 3:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	1.86	J	1.02	MDL	10.2	PQL	mg/Kg	U	B

Sample ID: SL-001-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 4:08:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.87	J	0.944	MDL	5.31	PQL	mg/Kg	J	Z
PHOSPHORUS	306		0.594	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	2360		19.1	MDL	53.1	PQL	mg/Kg	J	Q
SODIUM	105	J	39.6	MDL	106	PQL	mg/Kg	J	Z
TIN	2.33	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-001-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 4:16:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	413		0.668	MDL	11.9	PQL	mg/Kg	J	Q
POTASSIUM	4570		21.5	MDL	59.6	PQL	mg/Kg	J	Q
TIN	2.80	J	1.19	MDL	11.9	PQL	mg/Kg	U	B
Zirconium	4.76	J	1.00	MDL	5.96	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 2:37:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.64	J	0.959	MDL	5.39	PQL	mg/Kg	J	Z
PHOSPHORUS	349		0.603	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	2660		19.4	MDL	53.9	PQL	mg/Kg	J	Q
TIN	2.50	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.44	J	0.905	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: SL-006-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 9:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	419		0.608	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	3630		19.5	MDL	54.3	PQL	mg/Kg	J	Q
TIN	2.29	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.82	J	0.912	MDL	5.43	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-006-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 9:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.83	J	0.941	MDL	5.29	PQL	mg/Kg	J	Z
PHOSPHORUS	318		0.592	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	2590		19.0	MDL	52.9	PQL	mg/Kg	J	Q
TIN	2.43	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.68	J	0.888	MDL	5.29	PQL	mg/Kg	J	Z

Sample ID: SL-007-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.96	J	0.949	MDL	5.33	PQL	mg/Kg	J	Z
PHOSPHORUS	430		0.597	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	2790		19.2	MDL	53.3	PQL	mg/Kg	J	Q
TIN	2.45	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.20	J	0.896	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	310		0.605	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	2560		19.4	MDL	54.0	PQL	mg/Kg	J	Q
TIN	2.43	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.75	J	0.907	MDL	5.40	PQL	mg/Kg	J	Z

Sample ID: SL-075-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:03:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.61	J	0.938	MDL	5.27	PQL	mg/Kg	J	Z
PHOSPHORUS	509		0.590	MDL	10.5	PQL	mg/Kg	J	Q
POTASSIUM	3410		19.0	MDL	52.7	PQL	mg/Kg	J	Q
TIN	2.61	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	2.25	J	0.886	MDL	5.27	PQL	mg/Kg	J	Z

Sample ID: SL-077-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 10:04:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.83	J	0.939	MDL	5.28	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-077-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 10:04:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	517		0.591	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	2400		19.0	MDL	52.8	PQL	mg/Kg	J	Q
SODIUM	90.4	J	39.4	MDL	106	PQL	mg/Kg	J	Z
TIN	2.62	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.35	J	0.886	MDL	5.28	PQL	mg/Kg	J	Z

Sample ID: SL-085-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 1:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	422		0.588	MDL	10.5	PQL	mg/Kg	J	Q
POTASSIUM	3390		18.9	MDL	52.5	PQL	mg/Kg	J	Q
TIN	2.65	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: SL-087-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 1:17:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.31	J	0.954	MDL	5.36	PQL	mg/Kg	J	Z
PHOSPHORUS	451		0.600	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	3220		19.3	MDL	53.6	PQL	mg/Kg	J	Q
TIN	2.61	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.44	J	0.900	MDL	5.36	PQL	mg/Kg	J	Z

Sample ID: SL-091-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 3:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	518		0.586	MDL	10.5	PQL	mg/Kg	J	Q
POTASSIUM	4880		18.8	MDL	52.3	PQL	mg/Kg	J	Q
TIN	2.86	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	3.18	J	0.879	MDL	5.23	PQL	mg/Kg	J	Z

Sample ID: SL-095-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 2:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.36	J	0.928	MDL	5.21	PQL	mg/Kg	J	Z
PHOSPHORUS	441		0.584	MDL	10.4	PQL	mg/Kg	J	Q
POTASSIUM	3440		18.8	MDL	52.1	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 6010B **Matrix:** SO

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.88	J	0.875	MDL	5.21	PQL	mg/Kg	J	Z

Method Category: METALS **Method:** 6020 **Matrix:** AQ

Sample ID: EB15-SA5B-121310 *Collected:* 12/13/2010 12:15:00 *Analysis Type:* REA6 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000099	J	0.000052	MDL	0.0010	PQL	mg/L	J	Z

Method Category: METALS **Method:** 6020 **Matrix:** SO

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.102	J	0.0409	MDL	0.114	PQL	mg/Kg	J	Z, Q

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.340	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.419		0.0568	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	123		0.123	MDL	0.454	PQL	mg/Kg	J	A

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP13-SA5C-QC-121310 **Collected:** 12/13/2010 10:10:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.214	J	0.0681	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	7.66		0.0681	MDL	0.454	PQL	mg/Kg	J	Q
LEAD	9.46		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, A
SILVER	0.0310	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z, Q
ZINC	91.3		0.636	MDL	3.41	PQL	mg/Kg	J	A

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 2:57:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.249		0.0404	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 2:57:00 **Analysis Type:** REA2 **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	25.0		0.0292	MDL	0.561	PQL	mg/Kg	J	Q, A

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 2:57:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.168	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 2:57:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.707		0.0561	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 2:57:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	112		0.121	MDL	0.449	PQL	mg/Kg	J	A

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 2:57:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.192	J	0.0673	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	8.28		0.0673	MDL	0.449	PQL	mg/Kg	J	Q
SILVER	1.39		0.0135	MDL	0.112	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SED-032-SIV-SD-0.0-0.5** ***Collected:*** **12/13/2010 2:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	109		0.628	MDL	3.37	PQL	mg/Kg	J	A

Sample ID: **SED-033-SIV-SD-0.0-0.5** ***Collected:*** **12/13/2010 3:40:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.150		0.0375	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: **SED-033-SIV-SD-0.0-0.5** ***Collected:*** **12/13/2010 3:40:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.209	J	0.0416	MDL	0.416	PQL	mg/Kg	J	Z

Sample ID: **SED-033-SIV-SD-0.0-0.5** ***Collected:*** **12/13/2010 3:40:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.691		0.0520	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: **SED-033-SIV-SD-0.0-0.5** ***Collected:*** **12/13/2010 3:40:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	133		0.112	MDL	0.416	PQL	mg/Kg	J	A

Sample ID: **SED-033-SIV-SD-0.0-0.5** ***Collected:*** **12/13/2010 3:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.286		0.0624	MDL	0.208	PQL	mg/Kg	J	Q
ARSENIC	9.50		0.0624	MDL	0.416	PQL	mg/Kg	J	Q
LEAD	15.0		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, A
SILVER	0.329		0.0125	MDL	0.104	PQL	mg/Kg	J	Q
ZINC	118		0.583	MDL	3.12	PQL	mg/Kg	J	A

Sample ID: **SL-001-SA5C-SB-4.0-5.0** ***Collected:*** **12/13/2010 4:08:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0626	J	0.0382	MDL	0.106	PQL	mg/Kg	J	Z, Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-001-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 4:08:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.153	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 4:08:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.760		0.0531	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-001-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 4:08:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	89.2		0.115	MDL	0.424	PQL	mg/Kg	J	A

Sample ID: SL-001-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 4:08:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0994	J	0.0637	MDL	0.212	PQL	mg/Kg	J	Z, Q
ARSENIC	7.96		0.0637	MDL	0.424	PQL	mg/Kg	J	Q
LEAD	5.49		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, A
SILVER	0.0190	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
ZINC	79.0		0.594	MDL	3.18	PQL	mg/Kg	J	A

Sample ID: SL-001-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 4:16:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.212		0.0434	MDL	0.120	PQL	mg/Kg	J	Q

Sample ID: SL-001-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 4:16:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.190	J	0.0482	MDL	0.482	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 4:16:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.12		0.0602	MDL	0.120	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-001-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 4:16:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	203		0.130	MDL	0.482	PQL	mg/Kg	J	A

Sample ID: SL-001-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 4:16:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.559		0.0723	MDL	0.241	PQL	mg/Kg	J	Q
ARSENIC	12.2		0.0723	MDL	0.482	PQL	mg/Kg	J	Q
LEAD	13.0		0.0125	MDL	0.241	PQL	mg/Kg	J	Q, A
SILVER	0.0765	J	0.0145	MDL	0.120	PQL	mg/Kg	J	Z, Q
ZINC	115		0.675	MDL	3.61	PQL	mg/Kg	J	A

Sample ID: SL-003-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 2:37:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0875	J	0.0373	MDL	0.104	PQL	mg/Kg	J	Z, Q

Sample ID: SL-003-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 2:37:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.177	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 2:37:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.780		0.0518	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-003-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 2:37:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	119		0.112	MDL	0.414	PQL	mg/Kg	J	A

Sample ID: SL-003-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 2:37:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.174	J	0.0622	MDL	0.207	PQL	mg/Kg	J	Z, Q
ARSENIC	7.50		0.0622	MDL	0.414	PQL	mg/Kg	J	Q
LEAD	6.10		0.0108	MDL	0.207	PQL	mg/Kg	J	Q, A

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-003-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 2:37:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0366	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z, Q
ZINC	89.1		0.580	MDL	3.11	PQL	mg/Kg	J	A

Sample ID: SL-006-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 9:45:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.108	J	0.0402	MDL	0.112	PQL	mg/Kg	J	Z, Q

Sample ID: SL-006-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 9:45:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.299	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-006-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 9:45:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.517		0.0559	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-006-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 9:45:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	128		0.121	MDL	0.447	PQL	mg/Kg	J	A

Sample ID: SL-006-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 9:45:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.272		0.0670	MDL	0.223	PQL	mg/Kg	J	Q
ARSENIC	6.87		0.0670	MDL	0.447	PQL	mg/Kg	J	Q
LEAD	9.45		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, A
SILVER	0.0341	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q
ZINC	81.2		0.626	MDL	3.35	PQL	mg/Kg	J	A

Sample ID: SL-006-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 9:55:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.248		0.0388	MDL	0.108	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-006-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 9:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.241	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-006-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 9:55:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.790		0.0539	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-006-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 9:55:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	106		0.116	MDL	0.431	PQL	mg/Kg	J	A

Sample ID: SL-006-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 9:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.296		0.0647	MDL	0.216	PQL	mg/Kg	J	Q
ARSENIC	11.4		0.0647	MDL	0.431	PQL	mg/Kg	J	Q
LEAD	13.0		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, A
SILVER	0.0704	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q
ZINC	114		0.604	MDL	3.24	PQL	mg/Kg	J	A

Sample ID: SL-007-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0887	J	0.0388	MDL	0.108	PQL	mg/Kg	J	Z, Q

Sample ID: SL-007-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.141	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-007-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.684		0.0539	MDL	0.108	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-007-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	138		0.116	MDL	0.431	PQL	mg/Kg	J	A

Sample ID: SL-007-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.156	J	0.0646	MDL	0.215	PQL	mg/Kg	J	Z, Q
ARSENIC	6.80		0.0646	MDL	0.431	PQL	mg/Kg	J	Q
LEAD	6.51		0.0112	MDL	0.215	PQL	mg/Kg	J	Q, A
SILVER	0.0301	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q
ZINC	94.7		0.603	MDL	3.23	PQL	mg/Kg	J	A

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.128		0.0385	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.185	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.16		0.0535	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	132		0.115	MDL	0.428	PQL	mg/Kg	J	A

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.132	J	0.0642	MDL	0.214	PQL	mg/Kg	J	Z, Q
ARSENIC	9.29		0.0642	MDL	0.428	PQL	mg/Kg	J	Q
LEAD	7.95		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, A

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-007-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 12:14:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0588	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z, Q
ZINC	90.9		0.599	MDL	3.21	PQL	mg/Kg	J	A

Sample ID: SL-075-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:03:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.173		0.0376	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-075-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:03:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.199	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SL-075-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:03:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.843		0.0522	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-075-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:03:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	151		0.113	MDL	0.418	PQL	mg/Kg	J	A

Sample ID: SL-075-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:03:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.193	J	0.0626	MDL	0.209	PQL	mg/Kg	J	Z, Q
ARSENIC	8.68		0.0626	MDL	0.418	PQL	mg/Kg	J	Q
LEAD	10.0		0.0109	MDL	0.209	PQL	mg/Kg	J	Q, A
SILVER	0.173		0.0125	MDL	0.104	PQL	mg/Kg	J	Q
ZINC	127		0.585	MDL	3.13	PQL	mg/Kg	J	A

Sample ID: SL-077-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:04:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.130		0.0380	MDL	0.106	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-077-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:04:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0944	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-077-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:04:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.538		0.0528	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-077-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:04:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	97.9		0.114	MDL	0.422	PQL	mg/Kg	J	A

Sample ID: SL-077-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.215		0.0633	MDL	0.211	PQL	mg/Kg	J	Q
ARSENIC	8.71		0.0633	MDL	0.422	PQL	mg/Kg	J	Q
LEAD	6.50		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, A
SILVER	0.0576	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
ZINC	84.3		0.591	MDL	3.17	PQL	mg/Kg	J	A

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.490		0.0371	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.237	J	0.0412	MDL	0.412	PQL	mg/Kg	J	Z

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	10.7		0.0515	MDL	0.103	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-085-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:35:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	179		0.111	MDL	0.412	PQL	mg/Kg	J	A

Sample ID: SL-085-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:35:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.470		0.0618	MDL	0.206	PQL	mg/Kg	J	Q
ARSENIC	8.71		0.0618	MDL	0.412	PQL	mg/Kg	J	Q
LEAD	13.3		0.0107	MDL	0.206	PQL	mg/Kg	J	Q, A
SILVER	0.0715	J	0.0124	MDL	0.103	PQL	mg/Kg	J	Z, Q
ZINC	147		0.577	MDL	3.09	PQL	mg/Kg	J	A

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.282		0.0382	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.136	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.19		0.0531	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	143		0.115	MDL	0.424	PQL	mg/Kg	J	A

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.405		0.0637	MDL	0.212	PQL	mg/Kg	J	Q
ARSENIC	8.58		0.0637	MDL	0.424	PQL	mg/Kg	J	Q
LEAD	10.9		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, A

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.841		0.0127	MDL	0.106	PQL	mg/Kg	J	Q
ZINC	133		0.594	MDL	3.18	PQL	mg/Kg	J	A

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 3:10:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.271		0.0380	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 3:10:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.334	J	0.0423	MDL	0.423	PQL	mg/Kg	J	Z

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 3:10:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.31		0.0528	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 3:10:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	175		0.114	MDL	0.423	PQL	mg/Kg	J	A

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 3:10:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.437		0.0634	MDL	0.211	PQL	mg/Kg	J	Q
ARSENIC	10.8		0.0634	MDL	0.423	PQL	mg/Kg	J	Q
LEAD	15.2		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, A
SILVER	0.0585	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
ZINC	182		0.592	MDL	3.17	PQL	mg/Kg	J	A

Sample ID: SL-095-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 2:40:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.278		0.0364	MDL	0.101	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:40:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.159	J	0.0405	MDL	0.405	PQL	mg/Kg	J	Z

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.17		0.0506	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:40:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	162		0.109	MDL	0.405	PQL	mg/Kg	J	A

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.330		0.0607	MDL	0.202	PQL	mg/Kg	J	Q
ARSENIC	7.12		0.0607	MDL	0.405	PQL	mg/Kg	J	Q
LEAD	10.9		0.0105	MDL	0.202	PQL	mg/Kg	J	Q, A
SILVER	0.0526	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z, Q
ZINC	126		0.567	MDL	3.04	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.28	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 4:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.79	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-001-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 4:16:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 2:37:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.82	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-006-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 9:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.26	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-006-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 9:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.26	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-075-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:03:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.46	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-085-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.66	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 3:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 7199 **Matrix:** SO

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.52	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS **Method:** 7471A **Matrix:** SO

Sample ID: SED-032-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 2:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0148	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 4:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0073	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 2:37:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0131	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-007-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0043	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-077-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0036	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: SL-087-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0304	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-091-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0218	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	129		19.1	MDL	38.2	PQL	ng/Kg	J	FD

Sample ID: SL-006-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	18.8	U	18.8	MDL	37.6	PQL	ng/Kg	UJ	Q, FD

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	108	J	89.3	MDL	179	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SED-032-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 2:57:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.35		0.069	MDL	0.19	PQL	ug/Kg	J	S
DELTA-BHC	0.19		0.041	MDL	0.19	PQL	ug/Kg	J	S

Sample ID: SED-033-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 3:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.16	J	0.036	MDL	0.18	PQL	ug/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.12	J	0.038	MDL	0.17	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.44	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, FD

Sample ID: SED-033-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 3:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.7	J	0.70	MDL	3.6	PQL	ug/Kg	J	Z
AROCLOR 1260	2.1	J	0.70	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-003-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 2:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.3	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	0.61	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-006-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.97	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, S, FD

Sample ID: SL-007-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.71	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	1.9	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-007-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 12:14:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	1.4	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1254	1.1	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.88	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-075-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:03:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.9	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z

Sample ID: SL-077-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:04:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	1.3	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-085-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:35:00 **Analysis Type:** RES **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	9.7	J	5.4	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	5.1	J	2.2	MDL	7.2	PQL	ug/Kg	J	Z

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 3:10:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	38		0.72	MDL	3.7	PQL	ug/Kg	J	S
Aroclor 5460	2.8	J	2.2	MDL	7.2	PQL	ug/Kg	J	Z, S

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SED-032-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 2:57:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.92	U	0.92	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SED-033-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 3:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	5.1		0.66	MDL	1.8	PQL	ug/Kg	U	B
DINOSEB	0.85	U	0.85	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-075-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:03:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.94	J	0.43	MDL	1.3	PQL	ug/Kg	J	Z, Q
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L
MCPP	280		80	MDL	270	PQL	ug/Kg	U	B

Sample ID: SL-077-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.6	J	0.66	MDL	1.8	PQL	ug/Kg	U	B
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L
MCPA	200	J	81	MDL	270	PQL	ug/Kg	J	Z
MCPP	130	J	80	MDL	270	PQL	ug/Kg	U	B

Sample ID: SL-087-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	2.9		0.68	MDL	1.9	PQL	ug/Kg	U	B
DICAMBA	0.54	J	0.44	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 3:10:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-095-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 2:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	3.9		0.65	MDL	1.8	PQL	ug/Kg	U	B
DICAMBA	0.55	J	0.42	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: EB15-SA5B-121310 **Collected:** 12/13/2010 12:15:00 **Analysis Type:** RES-ACID **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 2:57:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	43	J	19	MDL	190	PQL	ug/Kg	J	Z
ANTHRACENE	37	J	19	MDL	190	PQL	ug/Kg	J	Z
CARBAZOLE	24	J	19	MDL	190	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	120	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	110	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-006-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 9:45:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROPHENYL-PHENYLETHER	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB15-SA5B-121310 *Collected:* 12/13/2010 12:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.24	J	0.050	MDL	1.0	PQL	ug/L	U	B
Butylbenzylphthalate	0.093	J	0.050	MDL	1.0	PQL	ug/L	U	B
Diethylphthalate	0.11	J	0.050	MDL	1.0	PQL	ug/L	U	B
Di-n-butylphthalate	0.31	J	0.050	MDL	1.0	PQL	ug/L	U	B
Di-n-octylphthalate	0.082	J	0.050	MDL	1.0	PQL	ug/L	U	B
NAPHTHALENE	0.033	J	0.010	MDL	0.050	PQL	ug/L	J	Z
PHENANTHRENE	0.018	J	0.010	MDL	0.050	PQL	ug/L	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.9	MDL	21	PQL	ug/Kg	U	B
CHRYSENE	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	FD

Sample ID: SED-032-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 2:57:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.49	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	30		6.9	MDL	21	PQL	ug/Kg	U	B

Sample ID: SED-033-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 3:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.94	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.96	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.99	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	17	J	6.4	MDL	19	PQL	ug/Kg	U	B
NAPHTHALENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-003-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 2:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-003-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 2:37:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	0.90	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.76	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.7	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-006-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 9:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	9.0	J	6.8	MDL	20	PQL	ug/Kg	U	B
CHRYSENE	0.46	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, FD

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	12	J	6.6	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.98	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-075-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:03:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.49	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.4	MDL	19	PQL	ug/Kg	U	B
DIBENZO(A,H)ANTHRACENE	0.78	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.2	J	6.4	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-077-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 10:04:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.7	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.4	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	9.0	J	6.5	MDL	19	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	1.2	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	14	J	6.4	MDL	19	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.0	J	6.4	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.99	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-087-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:17:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	14	J	6.6	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.91	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-091-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 3:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	25		6.5	MDL	20	PQL	ug/Kg	U	B
NAPHTHALENE	0.74	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	16	J	6.3	MDL	19	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	1.4	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8315A **Matrix:** SO

Sample ID: SL-006-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 9:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	990	J	650	MDL	1600	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-003-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 2:37:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	110	J	110	MDL	540	PQL	ug/Kg	J	Z

Sample ID: SL-007-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	140	J	110	MDL	550	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** AQ

Sample ID: EB15-SA5B-121310 *Collected:* 12/13/2010 12:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7	J	6	MDL	20	PQL	ug/L	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* RES *Dilution:* 1.1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.97	J	0.30	MDL	5.1	PQL	ug/Kg	U	B

Sample ID: SL-001-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 4:08:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	3.0	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-001-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 4:16:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	5.6	J	1.2	MDL	8.2	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.5	J	0.24	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-003-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 2:37:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.13	J	0.12	MDL	4.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	2.4	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-006-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 9:45:00 *Analysis Type:* RES *Dilution:* 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.63	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-006-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 9:55:00 *Analysis Type:* RES *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.7	J	7.3	MDL	8.8	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.1	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-007-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* RES *Dilution:* 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.14	J	0.12	MDL	4.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	2.5	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-007-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.4	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *Analysis Type:* RES *Dilution:* 1.29

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.5	J	0.33	MDL	5.5	PQL	ug/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1 **eQAPP Name: CDM_SSFL_110509**

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1 **eQAPP Name: CDM_SSFL_110509**

FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE037

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE037 **Laboratory: LL**
EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 9040B **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB15-SA5B-121310 (RES)	Sampling To Analysis	103.00	48.00	HOURS	J (all detects) R (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1. eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35548CB221648	12/23/2010 4:48:00 PM	MAGNESIUM	0.0421 mg/L	EB15-SA5B-121310
P35548CB222358	12/22/2010 11:58:00 PM	CALCIUM	0.0960 mg/L	EB15-SA5B-121310

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35108CB221941	12/20/2010 7:41:00 PM	PHOSPHORUS TIN	1.63 mg/Kg 1.28 mg/Kg	DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP13-SA5C-QC-121310(RES)	TIN	2.94 mg/Kg	2.94U mg/Kg
SED-032-SIV-SD-0.0-0.5(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SED-033-SIV-SD-0.0-0.5(RES)	TIN	1.86 mg/Kg	1.86U mg/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	TIN	2.33 mg/Kg	2.33U mg/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	TIN	2.80 mg/Kg	2.80U mg/Kg
SL-003-SA5C-SB-4.0-5.0(RES)	TIN	2.50 mg/Kg	2.50U mg/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	TIN	2.29 mg/Kg	2.29U mg/Kg
SL-006-SA5C-SB-9.0-10.0(RES)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-007-SA5C-SB-4.0-5.0(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-007-SA5C-SB-9.0-10.0(RES)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-075-SA5B-SS-0.0-0.5(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-077-SA5B-SS-0.0-0.5(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-085-SA5B-SS-0.0-0.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-087-SA5B-SS-0.0-0.5(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-091-SA5B-SS-0.0-0.5(RES)	TIN	2.86 mg/Kg	2.86U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1. eQAPP Name: CDM_SSFL_110509

Method: 8015B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P50505AB321750A	12/17/2010 5:50:00 PM	METHANOL	110 ug/Kg	DUP13-SA5C-QC-121310 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0

Method: 8151A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P51516AB242352A	12/20/2010 11:52:00 PM	2,4-DB MCPP	1.2 ug/Kg 160 ug/Kg	SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SED-033-SIV-SD-0.0-0.5(RES)	2,4-DB	5.1 ug/Kg	5.1U ug/Kg
SL-075-SA5B-SS-0.0-0.5(RES)	MCPP	280 ug/Kg	280U ug/Kg
SL-085-SA5B-SS-0.0-0.5(RES)	2,4-DB	1.6 ug/Kg	1.8U ug/Kg
SL-085-SA5B-SS-0.0-0.5(RES)	MCPP	130 ug/Kg	270U ug/Kg
SL-087-SA5B-SS-0.0-0.5(RES)	2,4-DB	2.9 ug/Kg	2.9U ug/Kg
SL-095-SA5B-SS-0.0-0.5(RES)	2,4-DB	3.9 ug/Kg	3.9U ug/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB16B212115A	12/14/2010 9:15:00 PM	CHLOROFORM METHYLENE CHLORIDE TOLUENE	0.22 ug/Kg 1.3 ug/Kg 0.09 ug/Kg	DUP13-SA5C-QC-121310 SL-001-SA5C-SB-4.0-5.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-085-SA5B-SS-0.0-0.5
VBLKB18B211848A	12/16/2010 6:48:00 PM	CHLOROFORM METHYLENE CHLORIDE	0.37 ug/Kg 1.0 ug/Kg	SL-001-SA5C-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP13-SA5C-QC-121310(RES)	METHYLENE CHLORIDE	0.97 ug/Kg	5.1U ug/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	3.0 ug/Kg	4.1U ug/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.1U ug/Kg
SL-003-SA5C-SB-4.0-5.0(RES)	CHLOROFORM	0.13 ug/Kg	4.0U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1. **eQAPP Name:** CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-003-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.4 ug/Kg	4.0U ug/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.63 ug/Kg	4.3U ug/Kg
SL-006-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.4U ug/Kg
SL-007-SA5C-SB-4.0-5.0(RES)	CHLOROFORM	0.14 ug/Kg	4.0U ug/Kg
SL-007-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.5 ug/Kg	4.0U ug/Kg
SL-007-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.4U ug/Kg
SL-085-SA5B-SS-0.0-0.5(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	5.5U ug/Kg

Method: 8270C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB35B262253	1/3/2011 10:53:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Diethylphthalate	18 ug/Kg 28 ug/Kg	DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWI34B262040	12/22/2010 8:40:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Butylbenzylphthalate Diethylphthalate Di-n-butylphthalate Di-n-octylphthalate	0.11 ug/L 0.076 ug/L 0.063 ug/L 0.13 ug/L 0.084 ug/L	EB15-SA5B-121310

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB15-SA5B-121310(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.24 ug/L	1.0U ug/L
EB15-SA5B-121310(RES)	Butylbenzylphthalate	0.093 ug/L	1.0U ug/L
EB15-SA5B-121310(RES)	Diethylphthalate	0.11 ug/L	1.0U ug/L

Method Blank Outlier Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1. eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB15-SA5B-121310(RES)	Di-n-butylphthalate	0.31 ug/L	1.0U ug/L
EB15-SA5B-121310(RES)	Di-n-octylphthalate	0.082 ug/L	1.0U ug/L

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLC35B261309	12/29/2010 1:09:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	6.3 ug/Kg	DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP13-SA5C-QC-121310(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	10 ug/Kg	21U ug/Kg
SED-032-SIV-SD-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	30 ug/Kg	30U ug/Kg
SED-033-SIV-SD-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	17 ug/Kg	19U ug/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	9.0 ug/Kg	20U ug/Kg
SL-075-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	10 ug/Kg	19U ug/Kg
SL-077-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	9.0 ug/Kg	19U ug/Kg
SL-091-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	25 ug/Kg	25U ug/Kg
SL-095-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	16 ug/Kg	19U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1. eQAPP Name: CDM_SSFL_110509

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-006-SA5C-SB-4.0-5.0MS (DUP13-SA5C-QC-121310 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	Nitrate-NO3	152	-	80.00-120.00	-	Nitrate-NO3	J (all detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-075-SA5B-SS-0.0-0.5MS SL-075-SA5B-SS-0.0-0.5MSD (SL-075-SA5B-SS-0.0-0.5)	2,4-D 2,4-DB DALAPON MCPA	- 188 - 232	- - 100 199	28.00-161.00 20.00-170.00 12.00-86.00 31.00-184.00	56 (35.00) - 72 (50.00) -	2,4-D 2,4-DB DALAPON MCPA	J(all detects)
SL-075-SA5B-SS-0.0-0.5MS SL-075-SA5B-SS-0.0-0.5MSD (SL-075-SA5B-SS-0.0-0.5)	DICAMBA	5	5	33.00-120.00	-	DICAMBA	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-006-SA5C-SB-4.0-5.0MS SL-006-SA5C-SB-4.0-5.0MSD (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	ARSENIC CADMIUM SILVER ZINC	140 129 - -	155 138 130 152	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ARSENIC CADMIUM SILVER ZINC	J(all detects) Zn No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-006-SA5C-SB-4.0-5.0MS **SL-006-SA5C-SB-4.0-5.0MSD** (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	ANTIMONY LEAD	51 -	58 67	75.00-125.00 75.00-125.00	- -	ANTIMONY LEAD	J(all detects) UJ(all non-detects)
SL-006-SA5C-SB-4.0-5.0MSD (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	MOLYBDENUM	-	133	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-006-SA5C-SB-4.0-5.0MS (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0. SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	BARIUM	63	-	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-006-SA5C-SB-4.0-5.0MS **SL-006-SA5C-SB-4.0-5.0MSD** (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	ALUMINUM IRON MANGANESE POTASSIUM TITANIUM	1450 483 167 134 528	1167 835 180 - 467	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM IRON MANGANESE POTASSIUM TITANIUM	J(all detects) Al, Fe, Mn, Ti No Qual, >4x
SL-006-SA5C-SB-4.0-5.0MS **SL-006-SA5C-SB-4.0-5.0MSD** (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	CALCIUM MAGNESIUM	-144 -242	-221 -219	75.00-125.00 75.00-125.00	- -	CALCIUM MAGNESIUM	No Qual, >4x
SL-006-SA5C-SB-4.0-5.0MS (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	PHOSPHORUS	54	-	75.00-125.00	-	PHOSPHORUS	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-006-SA5C-SB-4.0-5.0MSD (SL-006-SA5C-SB-4.0-5.0)	2,4-DINITROPHENOL	-	-	20.00-143.00	35 (30.00)	2,4-DINITROPHENOL	J(all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-006-SA5C-SB-4.0-5.0MSD	4-CHLOROPHENYL-PHENYLET	-	79	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	J(all detects)
(SL-006-SA5C-SB-4.0-5.0)	BENZIDINE	-	23	35.00-141.00	46 (30.00)	BENZIDINE	UJ(all non-detects)

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-006-SA5C-SB-4.0-5.0MSD	N-NITROSODIMETHYLAMINE	-	66	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects)
(SL-006-SA5C-SB-4.0-5.0)							UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-006-SA5C-SB-4.0-5.0DUP	ANTIMONY	49	20.00	
(DUP13-SA5C-QC-121310	MOLYBDENUM	22	20.00	
SED -032-SIV-SD-0.0-0.5	SILVER	26	20.00	
SED -033-SIV-SD-0.0-0.5				
SL -001-SA5C-SB-4.0-5.0				
SL -001-SA5C-SB-9.0-10.0				
SL -003-SA5C-SB-4.0-5.0				
SL -006-SA5C-SB-4.0-5.0				
SL -006-SA5C-SB-9.0-10.0				No Qual
SL -007-SA5C-SB-4.0-5.0				OK by difference
SL -007-SA5C-SB-9.0-10.0				
SL -075-SA5B-SS-0.0-0.5				
SL -077-SA5B-SS-0.0-0.5				
SL -085-SA5B-SS-0.0-0.5				
SL -087-SA5B-SS-0.0-0.5				
SL -091-SA5B-SS-0.0-0.5				
SL -095-SA5B-SS-0.0-0.5)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-006-SA5C-SB-4.0-5.0DUP	HEXAVALENT CHROMIUM	32	20.00	
(DUP13-SA5C-QC-121310				
SED -032-SIV-SD-0.0-0.5				
SED -033-SIV-SD-0.0-0.5				
SL -001-SA5C-SB-4.0-5.0				
SL -001-SA5C-SB-9.0-10.0				
SL -003-SA5C-SB-4.0-5.0				
SL -006-SA5C-SB-4.0-5.0				
SL -006-SA5C-SB-9.0-10.0				No Qual
SL -007-SA5C-SB-4.0-5.0				OK by difference
SL -007-SA5C-SB-9.0-10.0				
SL -075-SA5B-SS-0.0-0.5				
SL -077-SA5B-SS-0.0-0.5				
SL -085-SA5B-SS-0.0-0.5				
SL -087-SA5B-SS-0.0-0.5				
SL -091-SA5B-SS-0.0-0.5				
SL -095-SA5B-SS-0.0-0.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1. eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03506AY241102A (EB15-SA5B-121310)	4,4'-DDE	-	137	66.00-130.00	-	4,4'-DDE	J (all detects)

Method: 7199
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P34813AY271243A (EB15-SA5B-121310)	HEXAVALENT CHROMIUM	-	112	90.00-110.00	-	HEXAVALENT CHROMIUM	J(all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0WBLCSY262212 (EB15-SA5B-121310)	1,2-Diphenylhydrazine/Azobenzen	-	118	78.00-116.00	-	1,2-Diphenylhydrazine/Azobenz	J(all detects)
	2,4,5-TRICHLOROPHENOL	-	108	79.00-107.00	-	2,4,5-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	-	117	80.00-109.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	-	117	72.00-110.00	-	2,4-DIMETHYLPHENOL	
	2-CHLOROPHENOL	-	109	77.00-108.00	-	2-CHLOROPHENOL	
	2-METHYLPHENOL	-	102	64.00-101.00	-	2-METHYLPHENOL	
	DIBENZOFURAN	-	111	83.00-108.00	-	DIBENZOFURAN	
P0WBLCSY262212 (EB15-SA5B-121310)	BENZOIC ACID	-	-	10.00-69.00	44 (30.00)	BENZOIC ACID	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03516AQ240020A (SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	DINOSEB	8	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1. eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03556AQ240109A (SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	METHOXYCHLOR	131	-	59.00-125.00	-	METHOXYCHLOR	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8081A**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SED-032-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	135	20.00-120.00	All Target Analytes	J (all detects)

Method: **8082**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-006-SA5C-SB-4.0-5.0	DECACHLOROBIPHENYL	126	45.00-120.00	All Target Analytes	J(all detects)
SL-091-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	190	45.00-120.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
MOISTURE	11.4	12.8	12		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
N-NITROSODIMETHYLAMINE	37.6 U	129	200	50.00	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
FLUORIDE	3.3	3.6	9	50.00	No Qualifiers Applied
Nitrate-NO3	13.0	16.8	26	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
ALUMINUM	23700	26300	10	50.00	No Qualifiers Applied
BORON	7.11	5.54	25	50.00	
CALCIUM	7330	7160	2	50.00	
IRON	29600	33600	13	50.00	
LITHIUM	29.0	29.5	2	50.00	
MAGNESIUM	7030	7170	2	50.00	
MANGANESE	387	332	15	50.00	
PHOSPHORUS	419	397	5	50.00	
POTASSIUM	3630	3800	5	50.00	
SODIUM	198	189	5	50.00	
STRONTIUM	32.2	33.9	5	50.00	
TIN	2.29	2.94	25	50.00	
TITANIUM	1230	1560	24	50.00	
Zirconium	3.82	4.82	23	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
ANTIMONY	0.272	0.214	24	50.00	No Qualifiers Applied
ARSENIC	6.87	7.66	11	50.00	
BARIUM	128	123	4	50.00	
BERYLLIUM	0.957	0.962	1	50.00	
CADMIUM	0.108	0.102	6	50.00	
CHROMIUM	38.2	43.1	12	50.00	
COBALT	9.01	9.56	6	50.00	
COPPER	12.0	12.3	2	50.00	
LEAD	9.45	9.46	0	50.00	
MOLYBDENUM	0.517	0.419	21	50.00	
NICKEL	17.0	19.0	11	50.00	
SELENIUM	0.299	0.340	13	50.00	
SILVER	0.0341	0.0310	10	50.00	
THALLIUM	0.361	0.392	8	50.00	
VANADIUM	76.5	89.1	15	50.00	
ZINC	81.2	91.3	12	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
HEXAVALENT CHROMIUM	0.26	0.28	7	50.00	No Qualifiers Applied

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
AROCLOR 1254	0.97	0.44	75	50.00	J(all detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
METHYLENE CHLORIDE	0.63	0.97	42	50.00	No Qualifiers Applied

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
BIS(2-ETHYLHEXYL)PHTHALATE	9.0	10	11	50.00	No Qualifiers Applied
CHRYSENE	0.46	1.9 U	200	50.00	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
PH	8.16	8.05	1	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
Oxidation Reduction Potential	399	400	0		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1. **eQAPP Name:** CDM_SSFL_110509

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5B-121310	LEAD	J	0.000099	0.0010	PQL	mg/L	J (all detects)

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5B-121310	ACETONE	J	7	20	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5B-121310	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.24	1.0	PQL	ug/L	J (all detects)
	Butylbenzylphthalate	J	0.093	1.0	PQL	ug/L	
	Diethylphthalate	J	0.11	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.31	1.0	PQL	ug/L	
	Di-n-octylphthalate	J	0.082	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.033	0.050	PQL	ug/L	
	PHENANTHRENE	J	0.018	0.050	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-085-SA5B-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	108	179	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-033-SIV-SD-0.0-0.5	FLUORIDE	J	0.90	1.1	PQL	mg/Kg	J (all detects)
SL-001-SA5C-SB-4.0-5.0	Nitrate-NO3	J	1.2	1.6	PQL	mg/Kg	J (all detects)
SL-007-SA5C-SB-9.0-10.0	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)
SL-085-SA5B-SS-0.0-0.5	Nitrate-NO3	J	0.98	1.6	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5C-QC-121310	BORON	J	5.54	5.62	PQL	mg/Kg	J (all detects)
	TIN	J	2.94	11.2	PQL	mg/Kg	
	Zirconium	J	4.82	5.62	PQL	mg/Kg	
SED-032-SIV-SD-0.0-0.5	BORON	J	4.97	5.61	PQL	mg/Kg	J (all detects)
	SODIUM	J	78.8	112	PQL	mg/Kg	
	TIN	J	2.66	11.2	PQL	mg/Kg	
	Zirconium	J	1.22	5.61	PQL	mg/Kg	
SED-033-SIV-SD-0.0-0.5	BORON	J	3.23	5.10	PQL	mg/Kg	J (all detects)
	SODIUM	J	64.8	102	PQL	mg/Kg	
	TIN	J	1.86	10.2	PQL	mg/Kg	
SL-001-SA5C-SB-4.0-5.0	BORON	J	2.87	5.31	PQL	mg/Kg	J (all detects)
	SODIUM	J	105	106	PQL	mg/Kg	
	TIN	J	2.33	10.6	PQL	mg/Kg	
SL-001-SA5C-SB-9.0-10.0	TIN	J	2.80	11.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.76	5.96	PQL	mg/Kg	
SL-003-SA5C-SB-4.0-5.0	BORON	J	4.64	5.39	PQL	mg/Kg	J (all detects)
	TIN	J	2.50	10.8	PQL	mg/Kg	
	Zirconium	J	1.44	5.39	PQL	mg/Kg	
SL-006-SA5C-SB-4.0-5.0	TIN	J	2.29	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.82	5.43	PQL	mg/Kg	
SL-006-SA5C-SB-9.0-10.0	BORON	J	4.83	5.29	PQL	mg/Kg	J (all detects)
	TIN	J	2.43	10.6	PQL	mg/Kg	
	Zirconium	J	1.68	5.29	PQL	mg/Kg	
SL-007-SA5C-SB-4.0-5.0	BORON	J	4.96	5.33	PQL	mg/Kg	J (all detects)
	TIN	J	2.45	10.7	PQL	mg/Kg	
	Zirconium	J	1.20	5.33	PQL	mg/Kg	
SL-007-SA5C-SB-9.0-10.0	TIN	J	2.43	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.75	5.40	PQL	mg/Kg	
SL-075-SA5B-SS-0.0-0.5	BORON	J	3.61	5.27	PQL	mg/Kg	J (all detects)
	TIN	J	2.61	10.5	PQL	mg/Kg	
	Zirconium	J	2.25	5.27	PQL	mg/Kg	
SL-077-SA5B-SS-0.0-0.5	BORON	J	2.83	5.28	PQL	mg/Kg	J (all detects)
	SODIUM	J	90.4	106	PQL	mg/Kg	
	TIN	J	2.62	10.6	PQL	mg/Kg	
	Zirconium	J	1.35	5.28	PQL	mg/Kg	
SL-085-SA5B-SS-0.0-0.5	TIN	J	2.65	10.5	PQL	mg/Kg	J (all detects)
SL-087-SA5B-SS-0.0-0.5	BORON	J	5.31	5.36	PQL	mg/Kg	J (all detects)
	TIN	J	2.61	10.7	PQL	mg/Kg	
	Zirconium	J	3.44	5.36	PQL	mg/Kg	
SL-091-SA5B-SS-0.0-0.5	TIN	J	2.86	10.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.18	5.23	PQL	mg/Kg	
SL-095-SA5B-SS-0.0-0.5	BORON	J	4.36	5.21	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.88	5.21	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5C-QC-121310	ANTIMONY	J	0.214	0.227	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.102	0.114	PQL	mg/Kg	
	SELENIUM	J	0.340	0.454	PQL	mg/Kg	
	SILVER	J	0.0310	0.114	PQL	mg/Kg	
SED-032-SIV-SD-0.0-0.5	ANTIMONY	J	0.192	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.168	0.449	PQL	mg/Kg	
SED-033-SIV-SD-0.0-0.5	SELENIUM	J	0.209	0.416	PQL	mg/Kg	J (all detects)
SL-001-SA5C-SB-4.0-5.0	ANTIMONY	J	0.0994	0.212	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0626	0.106	PQL	mg/Kg	
	SELENIUM	J	0.153	0.424	PQL	mg/Kg	
	SILVER	J	0.0190	0.106	PQL	mg/Kg	
SL-001-SA5C-SB-9.0-10.0	SELENIUM	J	0.190	0.482	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0765	0.120	PQL	mg/Kg	
SL-003-SA5C-SB-4.0-5.0	ANTIMONY	J	0.174	0.207	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0875	0.104	PQL	mg/Kg	
	SELENIUM	J	0.177	0.414	PQL	mg/Kg	
	SILVER	J	0.0366	0.104	PQL	mg/Kg	
SL-006-SA5C-SB-4.0-5.0	CADMIUM	J	0.108	0.112	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.299	0.447	PQL	mg/Kg	
	SILVER	J	0.0341	0.112	PQL	mg/Kg	
SL-006-SA5C-SB-9.0-10.0	SELENIUM	J	0.241	0.431	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0704	0.108	PQL	mg/Kg	
SL-007-SA5C-SB-4.0-5.0	ANTIMONY	J	0.156	0.215	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0887	0.108	PQL	mg/Kg	
	SELENIUM	J	0.141	0.431	PQL	mg/Kg	
	SILVER	J	0.0301	0.108	PQL	mg/Kg	
SL-007-SA5C-SB-9.0-10.0	ANTIMONY	J	0.132	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.185	0.428	PQL	mg/Kg	
	SILVER	J	0.0588	0.107	PQL	mg/Kg	
SL-075-SA5B-SS-0.0-0.5	ANTIMONY	J	0.193	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.199	0.418	PQL	mg/Kg	
SL-077-SA5B-SS-0.0-0.5	SELENIUM	J	0.0944	0.422	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0576	0.106	PQL	mg/Kg	
SL-085-SA5B-SS-0.0-0.5	SELENIUM	J	0.237	0.412	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0715	0.103	PQL	mg/Kg	
SL-087-SA5B-SS-0.0-0.5	SELENIUM	J	0.136	0.424	PQL	mg/Kg	J (all detects)
SL-091-SA5B-SS-0.0-0.5	SELENIUM	J	0.334	0.423	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0585	0.106	PQL	mg/Kg	
SL-095-SA5B-SS-0.0-0.5	SELENIUM	J	0.159	0.405	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0526	0.101	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5C-QC-121310	HEXAVALENT CHROMIUM	J	0.28	1.1	PQL	mg/Kg	J (all detects)
SL-001-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.79	1.1	PQL	mg/Kg	J (all detects)
SL-001-SA5C-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.37	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.82	1.1	PQL	mg/Kg	J (all detects)
SL-006-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.26	1.1	PQL	mg/Kg	J (all detects)
SL-006-SA5C-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.26	1.1	PQL	mg/Kg	J (all detects)
SL-075-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.46	1.1	PQL	mg/Kg	J (all detects)
SL-085-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.66	1.1	PQL	mg/Kg	J (all detects)
SL-087-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)
SL-091-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-095-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.52	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-032-SIV-SD-0.0-0.5	MERCURY	J	0.0148	0.111	PQL	mg/Kg	J (all detects)
SL-001-SA5C-SB-9.0-10.0	MERCURY	J	0.0073	0.116	PQL	mg/Kg	J (all detects)
SL-003-SA5C-SB-4.0-5.0	MERCURY	J	0.0131	0.105	PQL	mg/Kg	J (all detects)
SL-007-SA5C-SB-9.0-10.0	MERCURY	J	0.0043	0.108	PQL	mg/Kg	J (all detects)
SL-077-SA5B-SS-0.0-0.5	MERCURY	J	0.0036	0.102	PQL	mg/Kg	J (all detects)
SL-087-SA5B-SS-0.0-0.5	MERCURY	J	0.0304	0.107	PQL	mg/Kg	J (all detects)
SL-091-SA5B-SS-0.0-0.5	MERCURY	J	0.0218	0.105	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA5C-SB-4.0-5.0	METHANOL	J	110	540	PQL	ug/Kg	J (all detects)
SL-007-SA5C-SB-9.0-10.0	METHANOL	J	140	550	PQL	ug/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-033-SIV-SD-0.0-0.5	ALPHA-BHC	J	0.16	0.18	PQL	ug/Kg	J (all detects)
SL-095-SA5B-SS-0.0-0.5	DELTA-BHC	J	0.12	0.17	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5C-QC-121310	AROCLOR 1254	J	0.44	1.9	PQL	ug/Kg	J (all detects)
SED-033-SIV-SD-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.7 2.1	3.6 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-003-SA5C-SB-4.0-5.0	AROCLOR 1254 AROCLOR 1260	J J	1.3 0.61	1.8 1.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-006-SA5C-SB-4.0-5.0	AROCLOR 1254	J	0.97	1.9	PQL	ug/Kg	J (all detects)
SL-007-SA5C-SB-4.0-5.0	AROCLOR 1260 Aroclor 5460	J J	0.71 1.9	1.8 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-007-SA5C-SB-9.0-10.0	AROCLOR 1248 AROCLOR 1254 AROCLOR 1260	J J J	1.4 1.1 0.88	1.9 1.9 1.9	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-075-SA5B-SS-0.0-0.5	Aroclor 5460	J	2.9	3.5	PQL	ug/Kg	J (all detects)
SL-077-SA5B-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.4 1.3	1.8 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-085-SA5B-SS-0.0-0.5	Aroclor 5460	J	9.7	18	PQL	ug/Kg	J (all detects)
SL-087-SA5B-SS-0.0-0.5	Aroclor 5460	J	5.1	7.2	PQL	ug/Kg	J (all detects)
SL-091-SA5B-SS-0.0-0.5	Aroclor 5460	J	2.8	7.2	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA5B-SS-0.0-0.5	DICAMBA	J	0.94	1.3	PQL	ug/Kg	J (all detects)
SL-085-SA5B-SS-0.0-0.5	2,4-DB MCPA MCPP	J J J	1.6 200 130	1.8 270 270	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-087-SA5B-SS-0.0-0.5	DICAMBA	J	0.54	1.3	PQL	ug/Kg	J (all detects)
SL-095-SA5B-SS-0.0-0.5	DICAMBA	J	0.55	1.3	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5C-QC-121310	METHYLENE CHLORIDE	J	0.97	5.1	PQL	ug/Kg	J (all detects)
SL-001-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	3.0	4.1	PQL	ug/Kg	J (all detects)
SL-001-SA5C-SB-9.0-10.0	2-BUTANONE (MEK) METHYLENE CHLORIDE TOLUENE	J J J	5.6 1.5 0.11	8.2 4.1 4.1	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-003-SA5C-SB-4.0-5.0	CHLOROFORM METHYLENE CHLORIDE	J J	0.13 2.4	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-006-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.63	4.3	PQL	ug/Kg	J (all detects)
SL-006-SA5C-SB-9.0-10.0	ACETONE METHYLENE CHLORIDE	J J	8.7 1.1	8.8 4.4	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5C-SB-4.0-5.0	CHLOROFORM	J	0.14	4.0	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	2.5	4.0	PQL	ug/Kg	
SL-007-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE	J	1.4	4.4	PQL	ug/Kg	J (all detects)
SL-085-SA5B-SS-0.0-0.5	METHYLENE CHLORIDE	J	1.5	5.5	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-032-SIV-SD-0.0-0.5	ACENAPHTHENE	J	43	190	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	37	190	PQL	ug/Kg	
	CARBAZOLE	J	24	190	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	120	190	PQL	ug/Kg	
	PHENANTHRENE	J	110	190	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5C-QC-121310	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	21	PQL	ug/Kg	J (all detects)
SED-032-SIV-SD-0.0-0.5	ACENAPHTHYLENE	J	0.49	1.9	PQL	ug/Kg	J (all detects)
SED-033-SIV-SD-0.0-0.5	1-METHYLNAPHTHALENE	J	0.94	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.96	1.8	PQL	ug/Kg	
	ANTHRACENE	J	0.99	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	17	19	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	
SL-003-SA5C-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.90	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.76	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
SL-006-SA5C-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.0	20	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.46	1.9	PQL	ug/Kg	
SL-007-SA5C-SB-9.0-10.0	BENZO(G,H,I)PERYLENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.5	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	12	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.98	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
SL-075-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.49	1.8	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	19	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.78	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.2	19	PQL	ug/Kg	
SL-077-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.7	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.3	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.0	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-085-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	14	19	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	9.0	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.99	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	1.8	PQL	ug/Kg	
SL-087-SA5B-SS-0.0-0.5	BENZO(K)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	14	20	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	0.91	1.8	PQL	ug/Kg	
SL-091-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.5	1.8	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.74	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
SL-095-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	16	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-006-SA5C-SB-9.0-10.0	FORMALDEHYDE	J	990	1600	PQL	ug/Kg	J (all detects)

LDC #: 25337I4 **VALIDATION COMPLETENESS WORKSHEET** Date: 5-5-11
SDG #: DE037 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CR
2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	ICB/CCB hits - No Qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, V, Zn >4x)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Mo, Ag <5xRL)
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Ba-16%, Pb-12%, Zn-11% :J/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB=4

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

1	SL-006-SA5C-SB-9.0-10.0	11	SL-095-SA5B-SS-0.0-0.5	21		31	
2	DUP13-SA5C-QC-121310	12	SL-091-SA5B-SS-0.0-0.5	22		32	
3	SL-006-SA5C-SB-4.0-5.0	13	SL-003-SA5B-SS-4.0-5.0	23		33	
4	EB-15-SA5B-121310 W	14	SL-001-SA5B-SS-4.0-5.0	24		34	
5	SL-007-SA5C-SB-4.0-5.0	15	SL-001-SA5B-SS-9.0-10.0	25		35	
6	SL-007-SA5C-SB-9.0-10.0	16	SED-032-SIV-SD-0.0-0.5	26		36	
7	SL-075-SA5B-SS-0.0-0.5	17	SED-033-SIV-SD-0.0-0.5	27		37	
8	SL-077-SA5B-SS-0.0-0.5	18	SL-006-SA5C-SB-4.0-5.0MS	28		38	
9	SL-085-SA5B-SS-0.0-0.5	19	SL-006-SA5C-SB-4.0-5.0MSD	29		39	
10	SL-087-SA5B-SS-0.0-0.5	20	SL-006-SA5C-SB-4.0-5.0DUP	30		40	

Notes: _____

LDC #: 25337I4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: CR
2nd Reviewer:

METHOD: Trace Metals (EPA SW846 6010B/7000)

(Y) N N/A Were field blanks identified in this SDG?
Y (N) N/A Were target analytes detected in the field blanks?

Blank units: ug/L **Associated sample units:** mg/Kg
Sampling date: 12/13/10 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification										
	8	Action Level	No Qualifiers (>5x)									
Pb	0.099	0.0495										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

SAMPLE DELIVERY GROUP

DE038

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-119-SA5B-SS-0.0-0.5	6164627	N	3050B	6010B	III
14-Dec-2010	SL-119-SA5B-SS-0.0-0.5	6164627	N	3050B	6020	III
14-Dec-2010	SL-119-SA5B-SS-0.0-0.5	6164627	N	3060A	7199	III
14-Dec-2010	SL-119-SA5B-SS-0.0-0.5	6164627	N	3550B	8081A	III
14-Dec-2010	SL-119-SA5B-SS-0.0-0.5	6164627	N	3550B	8082	III
14-Dec-2010	SL-119-SA5B-SS-0.0-0.5	6164627	N	3550B	8151A	III
14-Dec-2010	SL-119-SA5B-SS-0.0-0.5	6164627	N	3550B	8270C	III
14-Dec-2010	SL-119-SA5B-SS-0.0-0.5	6164627	N	3550B	8270C SIM	III
14-Dec-2010	SL-119-SA5B-SS-0.0-0.5	6164627	N	Gen Prep	9045M	III
14-Dec-2010	SL-119-SA5B-SS-0.0-0.5	6164627	N	METHOD	300.0	III
14-Dec-2010	SL-119-SA5B-SS-0.0-0.5	6164627	N	METHOD	314.0	III
14-Dec-2010	SL-119-SA5B-SS-0.0-0.5	6164627	N	METHOD	7471A	III
14-Dec-2010	SL-105-SA5B-SS-0.0-0.5	6164633	N	3050B	6010B	III
14-Dec-2010	SL-105-SA5B-SS-0.0-0.5	6164633	N	3050B	6020	III
14-Dec-2010	SL-105-SA5B-SS-0.0-0.5	6164633	N	3060A	7199	III
14-Dec-2010	SL-105-SA5B-SS-0.0-0.5	6164633	N	3550B	8081A	III
14-Dec-2010	SL-105-SA5B-SS-0.0-0.5	6164633	N	3550B	8082	III
14-Dec-2010	SL-105-SA5B-SS-0.0-0.5	6164633	N	3550B	8151A	III
14-Dec-2010	SL-105-SA5B-SS-0.0-0.5	6164633	N	3550B	8270C	III
14-Dec-2010	SL-105-SA5B-SS-0.0-0.5	6164633	N	3550B	8270C SIM	III
14-Dec-2010	SL-105-SA5B-SS-0.0-0.5	6164633	N	Gen Prep	9045M	III
14-Dec-2010	SL-105-SA5B-SS-0.0-0.5	6164633	N	METHOD	300.0	III
14-Dec-2010	SL-105-SA5B-SS-0.0-0.5	6164633	N	METHOD	314.0	III
14-Dec-2010	SL-105-SA5B-SS-0.0-0.5	6164633	N	METHOD	7471A	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5	6164622	N	3050B	6010B	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5	6164622	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5	6164622	N	3060A	7199	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5	6164622	N	3550B	8081A	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5	6164622	N	3550B	8082	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5	6164622	N	3550B	8151A	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5	6164622	N	3550B	8270C	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5	6164622	N	3550B	8270C SIM	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5	6164622	N	Gen Prep	9045M	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5	6164622	N	METHOD	300.0	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5	6164622	N	METHOD	314.0	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5	6164622	N	METHOD	7471A	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MS	6164623	MS	3050B	6010B	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MS	6164623	MS	3050B	6020	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MS	6164623	MS	3060A	7199	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MS	6164623	MS	3550B	8081A	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MS	6164623	MS	3550B	8082	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MS	6164623	MS	3550B	8151A	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MS	6164623	MS	3550B	8270C	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MS	6164623	MS	3550B	8270C SIM	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MS	6164623	MS	METHOD	300.0	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MS	6164623	MS	METHOD	314.0	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MS	6164623	MS	METHOD	7471A	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MSD	6164624	MSD	3050B	6010B	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MSD	6164624	MSD	3050B	6020	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MSD	6164624	MSD	3550B	8081A	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MSD	6164624	MSD	3550B	8082	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MSD	6164624	MSD	3550B	8151A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MSD	6164624	MSD	3550B	8270C	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MSD	6164624	MSD	3550B	8270C SIM	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MSD	6164624	MSD	METHOD	7471A	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5DUP	6164625	DUP	3050B	6010B	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5DUP	6164625	DUP	3050B	6020	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5DUP	6164625	DUP	3060A	7199	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5DUP	6164625	DUP	Gen Prep	9045M	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5DUP	6164625	DUP	METHOD	300.0	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5DUP	6164625	DUP	METHOD	314.0	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5DUP	6164625	DUP	METHOD	7471A	III
14-Dec-2010	DUP05-SA5B-QC-121410	6164621	FD	3050B	6010B	III
14-Dec-2010	DUP05-SA5B-QC-121410	6164621	FD	3050B	6020	III
14-Dec-2010	DUP05-SA5B-QC-121410	6164621	FD	3060A	7199	III
14-Dec-2010	DUP05-SA5B-QC-121410	6164621	FD	3550B	8081A	III
14-Dec-2010	DUP05-SA5B-QC-121410	6164621	FD	3550B	8082	III
14-Dec-2010	DUP05-SA5B-QC-121410	6164621	FD	3550B	8151A	III
14-Dec-2010	DUP05-SA5B-QC-121410	6164621	FD	3550B	8270C	III
14-Dec-2010	DUP05-SA5B-QC-121410	6164621	FD	3550B	8270C SIM	III
14-Dec-2010	DUP05-SA5B-QC-121410	6164621	FD	Gen Prep	9045M	III
14-Dec-2010	DUP05-SA5B-QC-121410	6164621	FD	METHOD	300.0	III
14-Dec-2010	DUP05-SA5B-QC-121410	6164621	FD	METHOD	314.0	III
14-Dec-2010	DUP05-SA5B-QC-121410	6164621	FD	METHOD	7471A	III
14-Dec-2010	SL-108-SA5B-SS-0.0-0.5	6164626	N	3050B	6010B	III
14-Dec-2010	SL-108-SA5B-SS-0.0-0.5	6164626	N	3050B	6020	III
14-Dec-2010	SL-108-SA5B-SS-0.0-0.5	6164626	N	3060A	7199	III
14-Dec-2010	SL-108-SA5B-SS-0.0-0.5	6164626	N	3550B	8081A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-108-SA5B-SS-0.0-0.5	6164626	N	3550B	8082	III
14-Dec-2010	SL-108-SA5B-SS-0.0-0.5	6164626	N	3550B	8151A	III
14-Dec-2010	SL-108-SA5B-SS-0.0-0.5	6164626	N	3550B	8270C	III
14-Dec-2010	SL-108-SA5B-SS-0.0-0.5	6164626	N	3550B	8270C SIM	III
14-Dec-2010	SL-108-SA5B-SS-0.0-0.5	6164626	N	Gen Prep	9045M	III
14-Dec-2010	SL-108-SA5B-SS-0.0-0.5	6164626	N	METHOD	300.0	III
14-Dec-2010	SL-108-SA5B-SS-0.0-0.5	6164626	N	METHOD	314.0	III
14-Dec-2010	SL-108-SA5B-SS-0.0-0.5	6164626	N	METHOD	7471A	III
14-Dec-2010	SL-109-SA5B-SS-0.0-0.5	6164629	N	3050B	6010B	III
14-Dec-2010	SL-109-SA5B-SS-0.0-0.5	6164629	N	3050B	6020	III
14-Dec-2010	SL-109-SA5B-SS-0.0-0.5	6164629	N	3060A	7199	III
14-Dec-2010	SL-109-SA5B-SS-0.0-0.5	6164629	N	3550B	8081A	III
14-Dec-2010	SL-109-SA5B-SS-0.0-0.5	6164629	N	3550B	8082	III
14-Dec-2010	SL-109-SA5B-SS-0.0-0.5	6164629	N	3550B	8151A	III
14-Dec-2010	SL-109-SA5B-SS-0.0-0.5	6164629	N	3550B	8270C	III
14-Dec-2010	SL-109-SA5B-SS-0.0-0.5	6164629	N	3550B	8270C SIM	III
14-Dec-2010	SL-109-SA5B-SS-0.0-0.5	6164629	N	Gen Prep	9045M	III
14-Dec-2010	SL-109-SA5B-SS-0.0-0.5	6164629	N	METHOD	300.0	III
14-Dec-2010	SL-109-SA5B-SS-0.0-0.5	6164629	N	METHOD	314.0	III
14-Dec-2010	SL-109-SA5B-SS-0.0-0.5	6164629	N	METHOD	7471A	III
14-Dec-2010	SL-121-SA5B-SS-0.0-0.5	6164631	N	3050B	6010B	III
14-Dec-2010	SL-121-SA5B-SS-0.0-0.5	6164631	N	3050B	6020	III
14-Dec-2010	SL-121-SA5B-SS-0.0-0.5	6164631	N	3060A	7199	III
14-Dec-2010	SL-121-SA5B-SS-0.0-0.5	6164631	N	3550B	8081A	III
14-Dec-2010	SL-121-SA5B-SS-0.0-0.5	6164631	N	3550B	8082	III
14-Dec-2010	SL-121-SA5B-SS-0.0-0.5	6164631	N	3550B	8151A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-121-SA5B-SS-0.0-0.5	6164631	N	3550B	8270C	III
14-Dec-2010	SL-121-SA5B-SS-0.0-0.5	6164631	N	3550B	8270C SIM	III
14-Dec-2010	SL-121-SA5B-SS-0.0-0.5	6164631	N	Gen Prep	9045M	III
14-Dec-2010	SL-121-SA5B-SS-0.0-0.5	6164631	N	METHOD	300.0	III
14-Dec-2010	SL-121-SA5B-SS-0.0-0.5	6164631	N	METHOD	314.0	III
14-Dec-2010	SL-121-SA5B-SS-0.0-0.5	6164631	N	METHOD	7471A	III
14-Dec-2010	SL-054-SA5B-SS-0.0-0.5	6164632	N	3050B	6010B	III
14-Dec-2010	SL-054-SA5B-SS-0.0-0.5	6164632	N	3050B	6020	III
14-Dec-2010	SL-054-SA5B-SS-0.0-0.5	6164632	N	3060A	7199	III
14-Dec-2010	SL-054-SA5B-SS-0.0-0.5	6164632	N	3550B	8081A	III
14-Dec-2010	SL-054-SA5B-SS-0.0-0.5	6164632	N	3550B	8082	III
14-Dec-2010	SL-054-SA5B-SS-0.0-0.5	6164632	N	3550B	8151A	III
14-Dec-2010	SL-054-SA5B-SS-0.0-0.5	6164632	N	3550B	8270C	III
14-Dec-2010	SL-054-SA5B-SS-0.0-0.5	6164632	N	3550B	8270C SIM	III
14-Dec-2010	SL-054-SA5B-SS-0.0-0.5	6164632	N	Gen Prep	9045M	III
14-Dec-2010	SL-054-SA5B-SS-0.0-0.5	6164632	N	METHOD	300.0	III
14-Dec-2010	SL-054-SA5B-SS-0.0-0.5	6164632	N	METHOD	314.0	III
14-Dec-2010	SL-054-SA5B-SS-0.0-0.5	6164632	N	METHOD	7471A	III
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5	6164628	N	3050B	6010B	III
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5	6164628	N	3050B	6020	III
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5	6164628	N	3060A	7199	III
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5	6164628	N	3550B	8081A	III
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5	6164628	N	3550B	8082	III
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5	6164628	N	3550B	8151A	III
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5	6164628	N	3550B	8270C	III
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5	6164628	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5	6164628	N	Gen Prep	9045M	III
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5	6164628	N	METHOD	300.0	III
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5	6164628	N	METHOD	314.0	III
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5	6164628	N	METHOD	7471A	III
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5DUP	P164628D291300A	DUP	Gen Prep	9045M	III
14-Dec-2010	SL-122-SA5B-SS-0.0-0.5	6164630	N	3050B	6010B	III
14-Dec-2010	SL-122-SA5B-SS-0.0-0.5	6164630	N	3050B	6020	III
14-Dec-2010	SL-122-SA5B-SS-0.0-0.5	6164630	N	3060A	7199	III
14-Dec-2010	SL-122-SA5B-SS-0.0-0.5	6164630	N	3550B	8081A	III
14-Dec-2010	SL-122-SA5B-SS-0.0-0.5	6164630	N	3550B	8082	III
14-Dec-2010	SL-122-SA5B-SS-0.0-0.5	6164630	N	3550B	8151A	III
14-Dec-2010	SL-122-SA5B-SS-0.0-0.5	6164630	N	3550B	8270C	III
14-Dec-2010	SL-122-SA5B-SS-0.0-0.5	6164630	N	3550B	8270C SIM	III
14-Dec-2010	SL-122-SA5B-SS-0.0-0.5	6164630	N	Gen Prep	9045M	III
14-Dec-2010	SL-122-SA5B-SS-0.0-0.5	6164630	N	METHOD	300.0	III
14-Dec-2010	SL-122-SA5B-SS-0.0-0.5	6164630	N	METHOD	314.0	III
14-Dec-2010	SL-122-SA5B-SS-0.0-0.5	6164630	N	METHOD	7471A	III
14-Dec-2010	SL-123-SA5B-SS-0.0-0.5	6164637	N	3050B	6010B	III
14-Dec-2010	SL-123-SA5B-SS-0.0-0.5	6164637	N	3050B	6020	III
14-Dec-2010	SL-123-SA5B-SS-0.0-0.5	6164637	N	3060A	7199	III
14-Dec-2010	SL-123-SA5B-SS-0.0-0.5	6164637	N	3550B	8081A	III
14-Dec-2010	SL-123-SA5B-SS-0.0-0.5	6164637	N	3550B	8082	III
14-Dec-2010	SL-123-SA5B-SS-0.0-0.5	6164637	N	3550B	8151A	III
14-Dec-2010	SL-123-SA5B-SS-0.0-0.5	6164637	N	3550B	8270C	III
14-Dec-2010	SL-123-SA5B-SS-0.0-0.5	6164637	N	3550B	8270C SIM	III
14-Dec-2010	SL-123-SA5B-SS-0.0-0.5	6164637	N	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-123-SA5B-SS-0.0-0.5	6164637	N	METHOD	300.0	III
14-Dec-2010	SL-123-SA5B-SS-0.0-0.5	6164637	N	METHOD	314.0	III
14-Dec-2010	SL-123-SA5B-SS-0.0-0.5	6164637	N	METHOD	7471A	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164634	N	3050B	6010B	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164634	N	3050B	6020	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164634	N	3060A	7199	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164634	N	3550B	8081A	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164634	N	3550B	8082	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164634	N	3550B	8151A	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164634	N	3550B	8270C	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164634	N	3550B	8270C SIM	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164634	N	Gen Prep	9045M	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164634	N	METHOD	300.0	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164634	N	METHOD	314.0	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164634	N	METHOD	6850	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164634	N	METHOD	7471A	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5DUP	P164634D270645B	DUP	METHOD	300.0	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5DUP	P164634D271907B	DUP	METHOD	314.0	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5MS	P164634R270659B	MS	METHOD	300.0	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5MS	P164634R271955B	MS	METHOD	314.0	III
14-Dec-2010	SL-124-SA5B-SS-0.0-0.5	6164638	N	3050B	6010B	III
14-Dec-2010	SL-124-SA5B-SS-0.0-0.5	6164638	N	3050B	6020	III
14-Dec-2010	SL-124-SA5B-SS-0.0-0.5	6164638	N	3060A	7199	III
14-Dec-2010	SL-124-SA5B-SS-0.0-0.5	6164638	N	3550B	8081A	III
14-Dec-2010	SL-124-SA5B-SS-0.0-0.5	6164638	N	3550B	8082	III
14-Dec-2010	SL-124-SA5B-SS-0.0-0.5	6164638	N	3550B	8151A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-124-SA5B-SS-0.0-0.5	6164638	N	3550B	8270C	III
14-Dec-2010	SL-124-SA5B-SS-0.0-0.5	6164638	N	3550B	8270C SIM	III
14-Dec-2010	SL-124-SA5B-SS-0.0-0.5	6164638	N	Gen Prep	9045M	III
14-Dec-2010	SL-124-SA5B-SS-0.0-0.5	6164638	N	METHOD	300.0	III
14-Dec-2010	SL-124-SA5B-SS-0.0-0.5	6164638	N	METHOD	314.0	III
14-Dec-2010	SL-124-SA5B-SS-0.0-0.5	6164638	N	METHOD	7471A	III
14-Dec-2010	SL-142-SA5B-SS-0.0-0.5	6164635	N	3050B	6010B	III
14-Dec-2010	SL-142-SA5B-SS-0.0-0.5	6164635	N	3050B	6020	III
14-Dec-2010	SL-142-SA5B-SS-0.0-0.5	6164635	N	3060A	7199	III
14-Dec-2010	SL-142-SA5B-SS-0.0-0.5	6164635	N	3550B	8081A	III
14-Dec-2010	SL-142-SA5B-SS-0.0-0.5	6164635	N	3550B	8082	III
14-Dec-2010	SL-142-SA5B-SS-0.0-0.5	6164635	N	3550B	8151A	III
14-Dec-2010	SL-142-SA5B-SS-0.0-0.5	6164635	N	3550B	8270C	III
14-Dec-2010	SL-142-SA5B-SS-0.0-0.5	6164635	N	3550B	8270C SIM	III
14-Dec-2010	SL-142-SA5B-SS-0.0-0.5	6164635	N	Gen Prep	9045M	III
14-Dec-2010	SL-142-SA5B-SS-0.0-0.5	6164635	N	METHOD	300.0	III
14-Dec-2010	SL-142-SA5B-SS-0.0-0.5	6164635	N	METHOD	314.0	III
14-Dec-2010	SL-142-SA5B-SS-0.0-0.5	6164635	N	METHOD	7471A	III
14-Dec-2010	SL-143-SA5B-SS-0.0-0.5	6164636	N	3050B	6010B	III
14-Dec-2010	SL-143-SA5B-SS-0.0-0.5	6164636	N	3050B	6020	III
14-Dec-2010	SL-143-SA5B-SS-0.0-0.5	6164636	N	3060A	7199	III
14-Dec-2010	SL-143-SA5B-SS-0.0-0.5	6164636	N	3550B	8081A	III
14-Dec-2010	SL-143-SA5B-SS-0.0-0.5	6164636	N	3550B	8082	III
14-Dec-2010	SL-143-SA5B-SS-0.0-0.5	6164636	N	3550B	8151A	III
14-Dec-2010	SL-143-SA5B-SS-0.0-0.5	6164636	N	3550B	8270C	III
14-Dec-2010	SL-143-SA5B-SS-0.0-0.5	6164636	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-143-SA5B-SS-0.0-0.5	6164636	N	Gen Prep	9045M	III
14-Dec-2010	SL-143-SA5B-SS-0.0-0.5	6164636	N	METHOD	300.0	III
14-Dec-2010	SL-143-SA5B-SS-0.0-0.5	6164636	N	METHOD	314.0	III
14-Dec-2010	SL-143-SA5B-SS-0.0-0.5	6164636	N	METHOD	7471A	III
14-Dec-2010	SED-025-SIV-SD-0.0-0.5	6164643	N	3050B	6010B	III
14-Dec-2010	SED-025-SIV-SD-0.0-0.5	6164643	N	3050B	6020	III
14-Dec-2010	SED-025-SIV-SD-0.0-0.5	6164643	N	3060A	7199	III
14-Dec-2010	SED-025-SIV-SD-0.0-0.5	6164643	N	3550B	8081A	III
14-Dec-2010	SED-025-SIV-SD-0.0-0.5	6164643	N	3550B	8082	III
14-Dec-2010	SED-025-SIV-SD-0.0-0.5	6164643	N	3550B	8151A	III
14-Dec-2010	SED-025-SIV-SD-0.0-0.5	6164643	N	3550B	8270C	III
14-Dec-2010	SED-025-SIV-SD-0.0-0.5	6164643	N	3550B	8270C SIM	III
14-Dec-2010	SED-025-SIV-SD-0.0-0.5	6164643	N	Gen Prep	9045M	III
14-Dec-2010	SED-025-SIV-SD-0.0-0.5	6164643	N	METHOD	300.0	III
14-Dec-2010	SED-025-SIV-SD-0.0-0.5	6164643	N	METHOD	314.0	III
14-Dec-2010	SED-025-SIV-SD-0.0-0.5	6164643	N	METHOD	7471A	III
14-Dec-2010	SL-309-SA5B-SS-0.0-0.5	6164639	N	3050B	6010B	III
14-Dec-2010	SL-309-SA5B-SS-0.0-0.5	6164639	N	3050B	6020	III
14-Dec-2010	SL-309-SA5B-SS-0.0-0.5	6164639	N	3060A	7199	III
14-Dec-2010	SL-309-SA5B-SS-0.0-0.5	6164639	N	3550B	8081A	III
14-Dec-2010	SL-309-SA5B-SS-0.0-0.5	6164639	N	3550B	8082	III
14-Dec-2010	SL-309-SA5B-SS-0.0-0.5	6164639	N	3550B	8151A	III
14-Dec-2010	SL-309-SA5B-SS-0.0-0.5	6164639	N	3550B	8270C	III
14-Dec-2010	SL-309-SA5B-SS-0.0-0.5	6164639	N	3550B	8270C SIM	III
14-Dec-2010	SL-309-SA5B-SS-0.0-0.5	6164639	N	Gen Prep	9045M	III
14-Dec-2010	SL-309-SA5B-SS-0.0-0.5	6164639	N	METHOD	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-309-SA5B-SS-0.0-0.5	6164639	N	METHOD	314.0	III
14-Dec-2010	SL-309-SA5B-SS-0.0-0.5	6164639	N	METHOD	7471A	III
14-Dec-2010	SL-310-SA5B-SS-0.0-0.5	6164641	N	3050B	6010B	III
14-Dec-2010	SL-310-SA5B-SS-0.0-0.5	6164641	N	3050B	6020	III
14-Dec-2010	SL-310-SA5B-SS-0.0-0.5	6164641	N	3060A	7199	III
14-Dec-2010	SL-310-SA5B-SS-0.0-0.5	6164641	N	3550B	8081A	III
14-Dec-2010	SL-310-SA5B-SS-0.0-0.5	6164641	N	3550B	8082	III
14-Dec-2010	SL-310-SA5B-SS-0.0-0.5	6164641	N	3550B	8151A	III
14-Dec-2010	SL-310-SA5B-SS-0.0-0.5	6164641	N	3550B	8270C	III
14-Dec-2010	SL-310-SA5B-SS-0.0-0.5	6164641	N	3550B	8270C SIM	III
14-Dec-2010	SL-310-SA5B-SS-0.0-0.5	6164641	N	Gen Prep	9045M	III
14-Dec-2010	SL-310-SA5B-SS-0.0-0.5	6164641	N	METHOD	300.0	III
14-Dec-2010	SL-310-SA5B-SS-0.0-0.5	6164641	N	METHOD	314.0	III
14-Dec-2010	SL-310-SA5B-SS-0.0-0.5	6164641	N	METHOD	7471A	III
14-Dec-2010	SL-311-SA5B-SS-0.0-0.5	6164640	N	3050B	6010B	III
14-Dec-2010	SL-311-SA5B-SS-0.0-0.5	6164640	N	3050B	6020	III
14-Dec-2010	SL-311-SA5B-SS-0.0-0.5	6164640	N	3060A	7199	III
14-Dec-2010	SL-311-SA5B-SS-0.0-0.5	6164640	N	3550B	8081A	III
14-Dec-2010	SL-311-SA5B-SS-0.0-0.5	6164640	N	3550B	8082	III
14-Dec-2010	SL-311-SA5B-SS-0.0-0.5	6164640	N	3550B	8151A	III
14-Dec-2010	SL-311-SA5B-SS-0.0-0.5	6164640	N	3550B	8270C	III
14-Dec-2010	SL-311-SA5B-SS-0.0-0.5	6164640	N	3550B	8270C SIM	III
14-Dec-2010	SL-311-SA5B-SS-0.0-0.5	6164640	N	Gen Prep	9045M	III
14-Dec-2010	SL-311-SA5B-SS-0.0-0.5	6164640	N	METHOD	300.0	III
14-Dec-2010	SL-311-SA5B-SS-0.0-0.5	6164640	N	METHOD	314.0	III
14-Dec-2010	SL-311-SA5B-SS-0.0-0.5	6164640	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-312-SA5B-SS-0.0-0.5	6164642	N	3050B	6010B	III
14-Dec-2010	SL-312-SA5B-SS-0.0-0.5	6164642	N	3050B	6020	III
14-Dec-2010	SL-312-SA5B-SS-0.0-0.5	6164642	N	3060A	7199	III
14-Dec-2010	SL-312-SA5B-SS-0.0-0.5	6164642	N	3550B	8081A	III
14-Dec-2010	SL-312-SA5B-SS-0.0-0.5	6164642	N	3550B	8082	III
14-Dec-2010	SL-312-SA5B-SS-0.0-0.5	6164642	N	3550B	8151A	III
14-Dec-2010	SL-312-SA5B-SS-0.0-0.5	6164642	N	3550B	8270C	III
14-Dec-2010	SL-312-SA5B-SS-0.0-0.5	6164642	N	3550B	8270C SIM	III
14-Dec-2010	SL-312-SA5B-SS-0.0-0.5	6164642	N	Gen Prep	9045M	III
14-Dec-2010	SL-312-SA5B-SS-0.0-0.5	6164642	N	METHOD	300.0	III
14-Dec-2010	SL-312-SA5B-SS-0.0-0.5	6164642	N	METHOD	314.0	III
14-Dec-2010	SL-312-SA5B-SS-0.0-0.5	6164642	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP05-SA5B-QC-121410 *Collected:* 12/14/2010 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.0	J	0.83	MDL	1.0	PQL	mg/Kg	J	FD

Sample ID: SL-120-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.83	U	0.83	MDL	1.0	PQL	mg/Kg	UJ	FD

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP05-SA5B-QC-121410 *Collected:* 12/14/2010 8:50:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	1870		6.16	MDL	20.1	PQL	mg/Kg	J	E
LITHIUM	4.4		0.22	MDL	2.0	PQL	mg/Kg	J	FD
MAGNESIUM	1170		2.55	MDL	10.1	PQL	mg/Kg	J	E
POTASSIUM	955		18.1	MDL	50.3	PQL	mg/Kg	J	E
SODIUM	37.5	U	37.5	MDL	101	PQL	mg/Kg	UJ	FD
Zirconium	1.19	J	0.844	MDL	5.03	PQL	mg/Kg	J	Z, FD

Sample ID: DUP05-SA5B-QC-121410 *Collected:* 12/14/2010 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	94.0		0.0784	MDL	0.503	PQL	mg/Kg	J	Q
TIN	1.69	J	1.01	MDL	10.1	PQL	mg/Kg	U	B, B
TITANIUM	248		0.382	MDL	1.01	PQL	mg/Kg	J	Q, E

Sample ID: SED-025-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 12:44:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3940		6.64	MDL	21.7	PQL	mg/Kg	J	E
MAGNESIUM	5230		2.75	MDL	10.8	PQL	mg/Kg	J	E
POTASSIUM	3320		19.5	MDL	54.2	PQL	mg/Kg	J	E
SODIUM	67.1	J	40.4	MDL	108	PQL	mg/Kg	J	Z
Zirconium	1.29	J	0.910	MDL	5.42	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SED-025-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 12:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	311		0.0845	MDL	0.542	PQL	mg/Kg	J	Q
TIN	2.54	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
TITANIUM	1250		0.412	MDL	1.08	PQL	mg/Kg	J	Q, E

Sample ID: SL-054-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:21:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.62	J	0.869	MDL	5.18	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:21:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	7360		6.34	MDL	20.7	PQL	mg/Kg	J	E
MAGNESIUM	4710		2.63	MDL	10.4	PQL	mg/Kg	J	E

Sample ID: SL-054-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:21:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3230		18.6	MDL	51.8	PQL	mg/Kg	J	E

Sample ID: SL-054-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:21:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	303		0.0807	MDL	0.518	PQL	mg/Kg	J	Q
TIN	2.78	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
TITANIUM	1310		0.393	MDL	1.04	PQL	mg/Kg	J	Q, E

Sample ID: SL-098-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:43:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.40	J	0.859	MDL	5.11	PQL	mg/Kg	J	Z

Sample ID: SL-098-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:43:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	7920		6.27	MDL	20.5	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-098-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 10:43:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MAGNESIUM	5590		2.60	MDL	10.2	PQL	mg/Kg	J	E

Sample ID: SL-098-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 10:43:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4600		18.4	MDL	51.1	PQL	mg/Kg	J	E

Sample ID: SL-098-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 10:43:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	312		0.0798	MDL	0.511	PQL	mg/Kg	J	Q
TIN	2.25	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
TITANIUM	1590		0.389	MDL	1.02	PQL	mg/Kg	J	Q, E

Sample ID: SL-105-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:35:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6520		6.34	MDL	20.7	PQL	mg/Kg	J	E
MAGNESIUM	5240		2.63	MDL	10.3	PQL	mg/Kg	J	E

Sample ID: SL-105-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:35:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3870		18.6	MDL	51.7	PQL	mg/Kg	J	E

Sample ID: SL-105-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	343		0.0806	MDL	0.517	PQL	mg/Kg	J	Q
TIN	2.60	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
TITANIUM	1340		0.393	MDL	1.03	PQL	mg/Kg	J	Q, E

Sample ID: SL-108-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:55:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5160		6.29	MDL	20.5	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-108-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 8:55:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MAGNESIUM	5140		2.60	MDL	10.3	PQL	mg/Kg	J	E

Sample ID: SL-108-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 8:55:00 **Analysis Type:** REA3 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3890		18.5	MDL	51.3	PQL	mg/Kg	J	E

Sample ID: SL-108-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 8:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	358		0.0800	MDL	0.513	PQL	mg/Kg	J	Q
TIN	2.61	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
TITANIUM	1500		0.390	MDL	1.03	PQL	mg/Kg	J	Q, E

Sample ID: SL-109-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 9:09:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.54	J	0.857	MDL	5.10	PQL	mg/Kg	J	Z

Sample ID: SL-109-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 9:09:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4040		6.26	MDL	20.4	PQL	mg/Kg	J	E
MAGNESIUM	4670		2.59	MDL	10.2	PQL	mg/Kg	J	E

Sample ID: SL-109-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 9:09:00 **Analysis Type:** REA3 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3240		18.4	MDL	51.0	PQL	mg/Kg	J	E

Sample ID: SL-109-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 9:09:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	307		0.0796	MDL	0.510	PQL	mg/Kg	J	Q
TIN	2.66	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
TITANIUM	1400		0.388	MDL	1.02	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 Laboratory: LL

EDD Filename: PrepDE038_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-119-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.08	J	0.883	MDL	5.25	PQL	mg/Kg	J	Z

Sample ID: SL-119-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3230		6.44	MDL	21.0	PQL	mg/Kg	J	E
MAGNESIUM	5420		2.67	MDL	10.5	PQL	mg/Kg	J	E

Sample ID: SL-119-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:30:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4930		18.9	MDL	52.5	PQL	mg/Kg	J	E
SODIUM	98.1	J	39.2	MDL	105	PQL	mg/Kg	J	Z

Sample ID: SL-119-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	427		0.0820	MDL	0.525	PQL	mg/Kg	J	Q
TIN	3.09	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
TITANIUM	1640		0.399	MDL	1.05	PQL	mg/Kg	J	Q, E

Sample ID: SL-120-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:47:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2070		6.33	MDL	20.6	PQL	mg/Kg	J	E
LITHIUM	7.6		0.23	MDL	2.1	PQL	mg/Kg	J	FD
MAGNESIUM	1850		2.62	MDL	10.3	PQL	mg/Kg	J	E
POTASSIUM	1440		18.6	MDL	51.6	PQL	mg/Kg	J	E
SODIUM	49.7	J	38.5	MDL	103	PQL	mg/Kg	J	Z, FD
Zirconium	2.17	J	0.867	MDL	5.16	PQL	mg/Kg	J	Z, FD

Sample ID: SL-120-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	131		0.0805	MDL	0.516	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-120-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.16	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
TITANIUM	404		0.392	MDL	1.03	PQL	mg/Kg	J	Q, E

Sample ID: SL-121-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:15:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.93	J	0.873	MDL	5.20	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:15:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3820		6.37	MDL	20.8	PQL	mg/Kg	J	E
MAGNESIUM	4540		2.64	MDL	10.4	PQL	mg/Kg	J	E

Sample ID: SL-121-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:15:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3780		18.7	MDL	52.0	PQL	mg/Kg	J	E
SODIUM	86.8	J	38.8	MDL	104	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	341		0.0811	MDL	0.520	PQL	mg/Kg	J	Q
TIN	2.53	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
TITANIUM	1280		0.395	MDL	1.04	PQL	mg/Kg	J	Q, E

Sample ID: SL-122-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.81	J	0.880	MDL	5.24	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2290		6.42	MDL	21.0	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-122-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MAGNESIUM	3150		2.66	MDL	10.5	PQL	mg/Kg	J	E

Sample ID: SL-122-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:40:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3020		18.9	MDL	52.4	PQL	mg/Kg	J	E
SODIUM	70.0	J	39.1	MDL	105	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	233		0.0817	MDL	0.524	PQL	mg/Kg	J	Q
TIN	2.31	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
TITANIUM	902		0.398	MDL	1.05	PQL	mg/Kg	J	Q, E

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.69	J	0.860	MDL	5.12	PQL	mg/Kg	J	Z

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2760		6.28	MDL	20.5	PQL	mg/Kg	J	E
MAGNESIUM	4130		2.60	MDL	10.2	PQL	mg/Kg	J	E

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2780		18.4	MDL	51.2	PQL	mg/Kg	J	E
SODIUM	75.6	J	38.2	MDL	102	PQL	mg/Kg	J	Z

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	275		0.0799	MDL	0.512	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 Laboratory: LL

EDD Filename: PrepDE038_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.76	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
TITANIUM	1130		0.389	MDL	1.02	PQL	mg/Kg	J	Q, E

Sample ID: SL-124-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.30	J	0.860	MDL	5.12	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3280		6.28	MDL	20.5	PQL	mg/Kg	J	E
MAGNESIUM	5200		2.60	MDL	10.2	PQL	mg/Kg	J	E

Sample ID: SL-124-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:00:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4950		18.4	MDL	51.2	PQL	mg/Kg	J	E
SODIUM	83.6	J	38.2	MDL	102	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	375		0.0799	MDL	0.512	PQL	mg/Kg	J	Q
TIN	3.05	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
TITANIUM	1470		0.389	MDL	1.02	PQL	mg/Kg	J	Q, E

Sample ID: SL-142-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:04:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.88	J	0.878	MDL	5.23	PQL	mg/Kg	J	Z

Sample ID: SL-142-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:04:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3390		6.41	MDL	20.9	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-142-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 11:04:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MAGNESIUM	5400		2.65	MDL	10.5	PQL	mg/Kg	J	E

Sample ID: SL-142-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 11:04:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2650		18.8	MDL	52.3	PQL	mg/Kg	J	E
SODIUM	77.6	J	39.0	MDL	105	PQL	mg/Kg	J	Z

Sample ID: SL-142-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 11:04:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	339		0.0815	MDL	0.523	PQL	mg/Kg	J	Q
TIN	3.07	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
TITANIUM	1380		0.397	MDL	1.05	PQL	mg/Kg	J	Q, E

Sample ID: SL-143-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 11:15:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.72	J	0.864	MDL	5.14	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 11:15:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2770		6.30	MDL	20.6	PQL	mg/Kg	J	E
MAGNESIUM	4560		2.61	MDL	10.3	PQL	mg/Kg	J	E

Sample ID: SL-143-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 11:15:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3870		18.5	MDL	51.4	PQL	mg/Kg	J	E
SODIUM	70.1	J	38.3	MDL	103	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 11:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	306		0.0802	MDL	0.514	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-143-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 11:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.62	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
TITANIUM	1270		0.391	MDL	1.03	PQL	mg/Kg	J	Q, E

Sample ID: SL-240-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:33:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.11	J	0.841	MDL	5.01	PQL	mg/Kg	J	Z

Sample ID: SL-240-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:33:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6410		6.14	MDL	20.0	PQL	mg/Kg	J	E
MAGNESIUM	5000		2.54	MDL	10.0	PQL	mg/Kg	J	E

Sample ID: SL-240-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:33:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3480		18.0	MDL	50.1	PQL	mg/Kg	J	E

Sample ID: SL-240-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:33:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	315		0.0781	MDL	0.501	PQL	mg/Kg	J	Q
TIN	2.62	J	1.00	MDL	10.0	PQL	mg/Kg	U	B
TITANIUM	1450		0.381	MDL	1.00	PQL	mg/Kg	J	Q, E

Sample ID: SL-309-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:25:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.25	J	0.866	MDL	5.16	PQL	mg/Kg	J	Z

Sample ID: SL-309-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:25:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3950		6.32	MDL	20.6	PQL	mg/Kg	J	E
MAGNESIUM	4380		2.62	MDL	10.3	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-309-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:25:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2790		18.6	MDL	51.6	PQL	mg/Kg	J	E

Sample ID: SL-309-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	254		0.0804	MDL	0.516	PQL	mg/Kg	J	Q
TIN	2.40	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
TITANIUM	1160		0.392	MDL	1.03	PQL	mg/Kg	J	Q, E

Sample ID: SL-310-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:45:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.64	J	0.869	MDL	5.17	PQL	mg/Kg	J	Z

Sample ID: SL-310-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:45:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3890		6.34	MDL	20.7	PQL	mg/Kg	J	E
MAGNESIUM	4640		2.63	MDL	10.3	PQL	mg/Kg	J	E

Sample ID: SL-310-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:45:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2900		18.6	MDL	51.7	PQL	mg/Kg	J	E

Sample ID: SL-310-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	273		0.0807	MDL	0.517	PQL	mg/Kg	J	Q
TIN	2.35	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
TITANIUM	1160		0.393	MDL	1.03	PQL	mg/Kg	J	Q, E

Sample ID: SL-311-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 2:00:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.31	J	0.901	MDL	5.36	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-311-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6910		6.58	MDL	21.5	PQL	mg/Kg	J	E
MAGNESIUM	3850		2.72	MDL	10.7	PQL	mg/Kg	J	E
POTASSIUM	2510		19.3	MDL	53.6	PQL	mg/Kg	J	E

Sample ID: SL-311-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	320		0.0837	MDL	0.536	PQL	mg/Kg	J	Q
TIN	1.88	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
TITANIUM	997		0.408	MDL	1.07	PQL	mg/Kg	J	Q, E

Sample ID: SL-312-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:27:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.60	J	0.875	MDL	5.21	PQL	mg/Kg	J	Z

Sample ID: SL-312-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:27:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	4280		6.39	MDL	20.8	PQL	mg/Kg	J	E
MAGNESIUM	4330		2.65	MDL	10.4	PQL	mg/Kg	J	E

Sample ID: SL-312-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:27:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2880		18.8	MDL	52.1	PQL	mg/Kg	J	E

Sample ID: SL-312-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	261		0.0813	MDL	0.521	PQL	mg/Kg	J	Q
TIN	2.69	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
TITANIUM	1110		0.396	MDL	1.04	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE038 Laboratory: LL

EDD Filename: PrepDE038_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP05-SA5B-QC-121410 *Collected:* 12/14/2010 8:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: DUP05-SA5B-QC-121410 *Collected:* 12/14/2010 8:50:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	56.9		0.112	MDL	0.414	PQL	mg/Kg	J	A

Sample ID: DUP05-SA5B-QC-121410 *Collected:* 12/14/2010 8:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.169	J	0.0621	MDL	0.207	PQL	mg/Kg	J	Z, Q
ARSENIC	4.38		0.0621	MDL	0.414	PQL	mg/Kg	J	Q
COBALT	4.40		0.0207	MDL	0.104	PQL	mg/Kg	J	A
SILVER	0.0124	U	0.0124	MDL	0.104	PQL	mg/Kg	UJ	FD
THALLIUM	0.0943	J	0.0311	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	20.2		0.0228	MDL	0.104	PQL	mg/Kg	J	Q, A

Sample ID: SED-025-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 12:44:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.160	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SED-025-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 12:44:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	118		0.118	MDL	0.438	PQL	mg/Kg	J	A

Sample ID: SED-025-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 12:44:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0657	MDL	0.219	PQL	mg/Kg	J	Z, Q
ARSENIC	4.21		0.0657	MDL	0.438	PQL	mg/Kg	J	Q
COBALT	6.33		0.0219	MDL	0.109	PQL	mg/Kg	J	A
SILVER	0.0400	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	47.0		0.0241	MDL	0.109	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-054-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:21:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.104	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:21:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	131		0.114	MDL	0.422	PQL	mg/Kg	J	A

Sample ID: SL-054-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:21:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.225		0.0633	MDL	0.211	PQL	mg/Kg	J	Q
ARSENIC	5.00		0.0633	MDL	0.422	PQL	mg/Kg	J	Q
COBALT	5.80		0.0211	MDL	0.106	PQL	mg/Kg	J	A
SILVER	0.0379	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	42.7		0.0232	MDL	0.106	PQL	mg/Kg	J	Q, A

Sample ID: SL-098-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:43:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0689	J	0.0405	MDL	0.405	PQL	mg/Kg	J	Z

Sample ID: SL-098-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:43:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	127		0.109	MDL	0.405	PQL	mg/Kg	J	A

Sample ID: SL-098-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:43:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.126	J	0.0608	MDL	0.203	PQL	mg/Kg	J	Z, Q
ARSENIC	3.81		0.0608	MDL	0.405	PQL	mg/Kg	J	Q
COBALT	7.01		0.0203	MDL	0.101	PQL	mg/Kg	J	A
SILVER	0.0257	J	0.0122	MDL	0.101	PQL	mg/Kg	J	Z
VANADIUM	45.6		0.0223	MDL	0.101	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-105-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 8:35:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0577	J	0.0409	MDL	0.409	PQL	mg/Kg	J	Z

Sample ID: SL-105-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 8:35:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.111	MDL	0.409	PQL	mg/Kg	J	A

Sample ID: SL-105-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 8:35:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.144	J	0.0614	MDL	0.205	PQL	mg/Kg	J	Z, Q
ARSENIC	4.15		0.0614	MDL	0.409	PQL	mg/Kg	J	Q
COBALT	6.24		0.0205	MDL	0.102	PQL	mg/Kg	J	A
SILVER	0.0340	J	0.0123	MDL	0.102	PQL	mg/Kg	J	Z
VANADIUM	43.3		0.0225	MDL	0.102	PQL	mg/Kg	J	Q, A

Sample ID: SL-108-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 8:55:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0656	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: SL-108-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 8:55:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	133		0.112	MDL	0.414	PQL	mg/Kg	J	A

Sample ID: SL-108-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 8:55:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.149	J	0.0621	MDL	0.207	PQL	mg/Kg	J	Z, Q
ARSENIC	4.46		0.0621	MDL	0.414	PQL	mg/Kg	J	Q
COBALT	6.76		0.0207	MDL	0.104	PQL	mg/Kg	J	A
SILVER	0.0221	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	44.0		0.0228	MDL	0.104	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-109-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:09:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0757	J	0.0412	MDL	0.412	PQL	mg/Kg	J	Z

Sample ID: SL-109-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:09:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.111	MDL	0.412	PQL	mg/Kg	J	A

Sample ID: SL-109-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:09:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.127	J	0.0618	MDL	0.206	PQL	mg/Kg	J	Z, Q
ARSENIC	5.97		0.0618	MDL	0.412	PQL	mg/Kg	J	Q
COBALT	5.79		0.0206	MDL	0.103	PQL	mg/Kg	J	A
SILVER	0.0289	J	0.0124	MDL	0.103	PQL	mg/Kg	J	Z
VANADIUM	43.7		0.0227	MDL	0.103	PQL	mg/Kg	J	Q, A

Sample ID: SL-119-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:30:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.161	J	0.0429	MDL	0.429	PQL	mg/Kg	J	Z

Sample ID: SL-119-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:30:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	170		0.116	MDL	0.429	PQL	mg/Kg	J	A

Sample ID: SL-119-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:30:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.222		0.0643	MDL	0.214	PQL	mg/Kg	J	Q
ARSENIC	6.66		0.0643	MDL	0.429	PQL	mg/Kg	J	Q
COBALT	7.67		0.0214	MDL	0.107	PQL	mg/Kg	J	A
SILVER	0.0445	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	46.8		0.0236	MDL	0.107	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE038 Laboratory: LL

EDD Filename: PrepDE038_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-120-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 8:47:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.146	J	0.0413	MDL	0.413	PQL	mg/Kg	J	Z

Sample ID: SL-120-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 8:47:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	48.1		0.112	MDL	0.413	PQL	mg/Kg	J	A

Sample ID: SL-120-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 8:47:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.155	J	0.0619	MDL	0.206	PQL	mg/Kg	J	Z, Q
ARSENIC	3.17		0.0619	MDL	0.413	PQL	mg/Kg	J	Q
COBALT	3.77		0.0206	MDL	0.103	PQL	mg/Kg	J	A
SILVER	0.0154	J	0.0124	MDL	0.103	PQL	mg/Kg	J	Z, FD
THALLIUM	0.101	J	0.0310	MDL	0.103	PQL	mg/Kg	J	Z
VANADIUM	17.5		0.0227	MDL	0.103	PQL	mg/Kg	J	Q, A

Sample ID: SL-121-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 9:15:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.158	J	0.0416	MDL	0.416	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 9:15:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	124		0.112	MDL	0.416	PQL	mg/Kg	J	A

Sample ID: SL-121-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 9:15:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.154	J	0.0624	MDL	0.208	PQL	mg/Kg	J	Z, Q
ARSENIC	5.88		0.0624	MDL	0.416	PQL	mg/Kg	J	Q
COBALT	6.14		0.0208	MDL	0.104	PQL	mg/Kg	J	A
SILVER	0.0291	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	39.1		0.0229	MDL	0.104	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-122-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:40:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.120	J	0.0407	MDL	0.407	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	102		0.110	MDL	0.407	PQL	mg/Kg	J	A

Sample ID: SL-122-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.103	J	0.0611	MDL	0.204	PQL	mg/Kg	J	Z, Q
ARSENIC	4.98		0.0611	MDL	0.407	PQL	mg/Kg	J	Q
COBALT	5.19		0.0204	MDL	0.102	PQL	mg/Kg	J	A
SILVER	0.0169	J	0.0122	MDL	0.102	PQL	mg/Kg	J	Z
VANADIUM	33.8		0.0224	MDL	0.102	PQL	mg/Kg	J	Q, A

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.209	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	114		0.113	MDL	0.418	PQL	mg/Kg	J	A

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.353		0.0626	MDL	0.209	PQL	mg/Kg	J	Q
ARSENIC	6.41		0.0626	MDL	0.418	PQL	mg/Kg	J	Q
COBALT	7.37		0.0209	MDL	0.104	PQL	mg/Kg	J	A
SILVER	0.0993	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	42.4		0.0230	MDL	0.104	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-124-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.181	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	176		0.113	MDL	0.418	PQL	mg/Kg	J	A

Sample ID: SL-124-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.238		0.0627	MDL	0.209	PQL	mg/Kg	J	Q
ARSENIC	7.25		0.0627	MDL	0.418	PQL	mg/Kg	J	Q
COBALT	8.02		0.0209	MDL	0.104	PQL	mg/Kg	J	A
SILVER	0.0973	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	55.1		0.0230	MDL	0.104	PQL	mg/Kg	J	Q, A

Sample ID: SL-142-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:04:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-142-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:04:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	116		0.114	MDL	0.422	PQL	mg/Kg	J	A

Sample ID: SL-142-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.125	J	0.0633	MDL	0.211	PQL	mg/Kg	J	Z, Q
ARSENIC	6.72		0.0633	MDL	0.422	PQL	mg/Kg	J	Q
COBALT	6.99		0.0211	MDL	0.106	PQL	mg/Kg	J	A
SILVER	0.0225	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	46.6		0.0232	MDL	0.106	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-143-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.112	J	0.0411	MDL	0.411	PQL	mg/Kg	J	Z

Sample ID: SL-143-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:15:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	90.8		0.111	MDL	0.411	PQL	mg/Kg	J	A

Sample ID: SL-143-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0659	J	0.0617	MDL	0.206	PQL	mg/Kg	J	Z, Q
ARSENIC	4.52		0.0617	MDL	0.411	PQL	mg/Kg	J	Q
CADMIUM	0.0929	J	0.0370	MDL	0.103	PQL	mg/Kg	J	Z
COBALT	5.26		0.0206	MDL	0.103	PQL	mg/Kg	J	A
SILVER	0.0330	J	0.0123	MDL	0.103	PQL	mg/Kg	J	Z
VANADIUM	36.0		0.0226	MDL	0.103	PQL	mg/Kg	J	Q, A

Sample ID: SL-240-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:33:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0812	J	0.0413	MDL	0.413	PQL	mg/Kg	J	Z

Sample ID: SL-240-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:33:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	129		0.111	MDL	0.413	PQL	mg/Kg	J	A

Sample ID: SL-240-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:33:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.113	J	0.0619	MDL	0.206	PQL	mg/Kg	J	Z, Q
ARSENIC	4.41		0.0619	MDL	0.413	PQL	mg/Kg	J	Q
COBALT	6.25		0.0206	MDL	0.103	PQL	mg/Kg	J	A
SILVER	0.0304	J	0.0124	MDL	0.103	PQL	mg/Kg	J	Z
VANADIUM	42.0		0.0227	MDL	0.103	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-309-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.135	J	0.0401	MDL	0.401	PQL	mg/Kg	J	Z

Sample ID: SL-309-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:25:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	98.2		0.108	MDL	0.401	PQL	mg/Kg	J	A

Sample ID: SL-309-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.318		0.0601	MDL	0.200	PQL	mg/Kg	J	Q
ARSENIC	4.83		0.0601	MDL	0.401	PQL	mg/Kg	J	Q
COBALT	5.45		0.0200	MDL	0.100	PQL	mg/Kg	J	A
SILVER	0.0146	J	0.0120	MDL	0.100	PQL	mg/Kg	J	Z
VANADIUM	35.5		0.0220	MDL	0.100	PQL	mg/Kg	J	Q, A

Sample ID: SL-310-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0956	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-310-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	132		0.114	MDL	0.422	PQL	mg/Kg	J	A

Sample ID: SL-310-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.242		0.0633	MDL	0.211	PQL	mg/Kg	J	Q
ARSENIC	5.32		0.0633	MDL	0.422	PQL	mg/Kg	J	Q
COBALT	5.12		0.0211	MDL	0.105	PQL	mg/Kg	J	A
SILVER	0.0217	J	0.0127	MDL	0.105	PQL	mg/Kg	J	Z
VANADIUM	40.0		0.0232	MDL	0.105	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-311-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.232	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z

Sample ID: SL-311-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	100		0.114	MDL	0.421	PQL	mg/Kg	J	A

Sample ID: SL-311-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.251		0.0631	MDL	0.210	PQL	mg/Kg	J	Q
ARSENIC	4.91		0.0631	MDL	0.421	PQL	mg/Kg	J	Q
COBALT	5.35		0.0210	MDL	0.105	PQL	mg/Kg	J	A
SILVER	0.103	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z
VANADIUM	36.0		0.0231	MDL	0.105	PQL	mg/Kg	J	Q, A

Sample ID: SL-312-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:27:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.157	J	0.0409	MDL	0.409	PQL	mg/Kg	J	Z

Sample ID: SL-312-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:27:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	105		0.110	MDL	0.409	PQL	mg/Kg	J	A

Sample ID: SL-312-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:27:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.142	J	0.0613	MDL	0.204	PQL	mg/Kg	J	Z, Q
ARSENIC	4.44		0.0613	MDL	0.409	PQL	mg/Kg	J	Q
COBALT	6.05		0.0204	MDL	0.102	PQL	mg/Kg	J	A
SILVER	0.0648	J	0.0123	MDL	0.102	PQL	mg/Kg	J	Z
VANADIUM	40.2		0.0225	MDL	0.102	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP05-SA5B-QC-121410 ***Collected:*** 12/14/2010 8:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	2.8		0.21	MDL	1.0	PQL	mg/Kg	J	FD

Sample ID: SL-054-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:21:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-108-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.52	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-119-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.57	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-120-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:47:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.21	U	0.21	MDL	1.0	PQL	mg/Kg	UJ	FD

Sample ID: SL-121-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-123-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 10:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.66	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 Laboratory: LL

EDD Filename: PrepDE038_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 7199 **Matrix:** SO

Sample ID: SL-124-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.59	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS **Method:** 7471A **Matrix:** SO

Sample ID: DUP05-SA5B-QC-121410 *Collected:* 12/14/2010 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0029	U	0.0029	MDL	0.101	PQL	mg/Kg	UJ	FD

Sample ID: SED-025-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 12:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0102	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-054-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:21:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0220	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: SL-098-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0248	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-105-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0207	J	0.0028	MDL	0.0979	PQL	mg/Kg	J	Z

Sample ID: SL-108-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0376	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-109-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:09:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0156	J	0.0029	MDL	0.0995	PQL	mg/Kg	J	Z

Sample ID: SL-120-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0103	J	0.0030	MDL	0.103	PQL	mg/Kg	J	Z, FD

Sample ID: SL-121-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0048	J	0.0028	MDL	0.0990	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0044	J	0.0028	MDL	0.0988	PQL	mg/Kg	J	Z

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0225	J	0.0029	MDL	0.0995	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0143	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-142-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0042	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: SL-240-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0229	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-309-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0061	J	0.0028	MDL	0.0985	PQL	mg/Kg	J	Z

Sample ID: SL-310-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0067	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-311-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0132	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-312-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0077	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-119-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.051	J	0.039	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-121-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.093	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z, L
4,4'-DDT	0.36		0.070	MDL	0.36	PQL	ug/Kg	J	L
HEPTACHLOR EPOXIDE	0.13	J	0.036	MDL	0.18	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	3.2		0.35	MDL	1.8	PQL	ug/Kg	J	L
4,4'-DDT	4.2		0.35	MDL	1.8	PQL	ug/Kg	J	L

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.46		0.036	MDL	0.18	PQL	ug/Kg	J	S
DELTA-BHC	0.12	J	0.038	MDL	0.18	PQL	ug/Kg	J	Z, S
ENDRIN ALDEHYDE	2.2		0.070	MDL	0.36	PQL	ug/Kg	J	S
HEPTACHLOR EPOXIDE	0.27		0.036	MDL	0.18	PQL	ug/Kg	J	S
MIREX	0.45		0.070	MDL	0.36	PQL	ug/Kg	J	S

Sample ID: SL-142-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.36	J	0.070	MDL	0.36	PQL	ug/Kg	J	L
4,4'-DDT	0.13	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z, L
HEPTACHLOR EPOXIDE	0.15	J	0.036	MDL	0.18	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP05-SA5B-QC-121410 *Collected:* 12/14/2010 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.5	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z, S
AROCLOR 1260	1.1	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z, S
Aroclor 5432	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L, E
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L, E
Aroclor 5460	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	FD, L, E

Sample ID: SED-025-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 12:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.2	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SED-025-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 12:44:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L, E
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E, L

Sample ID: SL-054-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:21:00 ***Analysis Type:*** REA-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.5	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L, E
Aroclor 5460	6.4		1.1	MDL	3.5	PQL	ug/Kg	J	E, L

Sample ID: SL-098-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 10:43:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	4.9	J	3.4	MDL	18	PQL	ug/Kg	J	Z
Aroclor 5432	10	U	10	MDL	34	PQL	ug/Kg	UJ	E, L
Aroclor 5442	10	U	10	MDL	34	PQL	ug/Kg	UJ	L, E
Aroclor 5460	10	U	10	MDL	34	PQL	ug/Kg	UJ	E, L

Sample ID: SL-105-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:35:00 ***Analysis Type:*** REA-BASE/NEUTRAL ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	30		0.69	MDL	3.5	PQL	ug/Kg	J	S
Aroclor 5432	2.1	U	2.1	MDL	6.9	PQL	ug/Kg	UJ	E, L
Aroclor 5442	2.1	U	2.1	MDL	6.9	PQL	ug/Kg	UJ	L, E
Aroclor 5460	4.6	J	2.1	MDL	6.9	PQL	ug/Kg	J	Z, S, E, L

Sample ID: SL-108-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:55:00 ***Analysis Type:*** REA-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	2.6		0.35	MDL	1.8	PQL	ug/Kg	J	S
Aroclor 5432	1.0	U	1.0	MDL	3.5	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.0	U	1.0	MDL	3.5	PQL	ug/Kg	UJ	L, E
Aroclor 5460	3.3	J	1.0	MDL	3.5	PQL	ug/Kg	J	Z, S, E, L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 Laboratory: LL

EDD Filename: PrepDE038_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-109-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:09:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L, E
Aroclor 5460	2.4	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, E, L

Sample ID: SL-119-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:30:00 *Analysis Type:* REA-BASE/NEUTRAL *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	31		0.71	MDL	3.7	PQL	ug/Kg	J	S
Aroclor 5432	2.2	U	2.2	MDL	7.1	PQL	ug/Kg	UJ	E, L
Aroclor 5442	2.2	U	2.2	MDL	7.1	PQL	ug/Kg	UJ	L, E
Aroclor 5460	3.8	J	2.2	MDL	7.1	PQL	ug/Kg	J	Z, S, E, L

Sample ID: SL-120-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:47:00 *Analysis Type:* REA-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.94	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z, S, Q
AROCLOR 1260	0.91	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z, Q, S
Aroclor 5432	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L, E
Aroclor 5460	1.9	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z, S, FD, E, L

Sample ID: SL-121-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L, E
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L

Sample ID: SL-122-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:40:00 *Analysis Type:* REA-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	2.0		0.35	MDL	1.8	PQL	ug/Kg	J	S
AROCLOR 1260	1.0	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, S
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-122-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L, E
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L

Sample ID: SL-124-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:00:00 *Analysis Type:* REA-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	10		0.35	MDL	1.8	PQL	ug/Kg	J	S
AROCLOR 1260	3.5		0.35	MDL	1.8	PQL	ug/Kg	J	S
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L, E
Aroclor 5460	4.8		1.1	MDL	3.5	PQL	ug/Kg	J	S, E, L

Sample ID: SL-142-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L, E
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L

Sample ID: SL-143-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:15:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	E, L

Sample ID: SL-143-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.67	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z, S
AROCLOR 1260	0.51	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-143-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L, E
Aroclor 5460	1.1	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z, S, E, L

Sample ID: SL-240-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:33:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L, E
Aroclor 5460	4.8		1.0	MDL	3.4	PQL	ug/Kg	J	E, L

Sample ID: SL-309-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.86	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L, E
Aroclor 5460	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	E, L

Sample ID: SL-310-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L, E
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L

Sample ID: SL-311-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L, E
Aroclor 5460	3.6		1.1	MDL	3.6	PQL	ug/Kg	J	E, L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-312-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:27:00 *Analysis Type:* REA-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.0	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	E, L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L, E
Aroclor 5460	5.2		1.1	MDL	3.5	PQL	ug/Kg	J	E, L

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: DUP05-SA5B-QC-121410 *Collected:* 12/14/2010 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	L
MCPP	140	U	140	MDL	260	PQL	ug/Kg	UJ	FD

Sample ID: SED-025-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 12:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	1.4	J	1.3	MDL	4.0	PQL	ug/Kg	J	Z
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-054-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:21:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.6	J	0.66	MDL	1.8	PQL	ug/Kg	J	Z
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-098-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:43:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	L
MCPP	150	J	77	MDL	260	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-105-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-108-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:55:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-109-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:09:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.85	U	0.85	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-119-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-120-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 8:47:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DALAPON	4.6	U	4.6	MDL	9.4	PQL	ug/Kg	R	Q
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	L
MCPA	720		79	MDL	260	PQL	ug/Kg	J	Q, Q
MCPP	200	J	78	MDL	260	PQL	ug/Kg	J	Z, FD

Sample ID: SL-121-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:15:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.85	U	0.85	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-122-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	8.0		0.66	MDL	1.8	PQL	ug/Kg	J	S
DINOSEB	0.85	U	0.85	MDL	2.5	PQL	ug/Kg	R	L
MCPA	990		80	MDL	260	PQL	ug/Kg	J	S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-122-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPP	240	J	79	MDL	260	PQL	ug/Kg	J	Z, S

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.51	J	0.43	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L
MCPP	240	J	80	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-124-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICHLOROPROP	47		0.84	MDL	1.8	PQL	ug/Kg	J	S
DINOSEB	1.5	U	1.5	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-142-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.1	J	0.66	MDL	1.8	PQL	ug/Kg	J	Z
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L
MCPP	91	J	80	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-143-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-240-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:33:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	L
MCPP	150	J	78	MDL	260	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-309-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	0.70	J	0.65	MDL	1.8	PQL	ug/Kg	J	Z
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-310-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L
MCPA	98	J	80	MDL	260	PQL	ug/Kg	J	Z

Sample ID: SL-311-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	6.5		0.67	MDL	1.8	PQL	ug/Kg	J	S
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-312-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	1.6	J	0.65	MDL	1.8	PQL	ug/Kg	J	Z
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L
MCPP	81	J	79	MDL	260	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-054-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:21:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	30	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	110	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	69	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	74	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	31	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	32	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	130	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-054-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:21:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
INDENO(1,2,3-CD)PYRENE	32	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	75	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-108-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	37	J	17	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-109-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:09:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	18	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-119-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-120-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:47:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1200	U	1200	MDL	3500	PQL	ug/Kg	UJ	Q

Sample ID: SL-123-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	89	J	18	MDL	350	PQL	ug/Kg	J	Z
Butylbenzylphthalate	21	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	33	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	22	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	30	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-309-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	20	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-309-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	18	J	17	MDL	170	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	17	J	17	MDL	170	PQL	ug/Kg	J	Z
FLUORANTHENE	18	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	23	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-312-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Dimethylphthalate	19	J	18	MDL	180	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: DUP05-SA5B-QC-121410 *Collected:* 12/14/2010 8:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.69	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(A)ANTHRACENE	10		0.69	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(A)PYRENE	16		0.69	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(B)FLUORANTHENE	22		0.69	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	16		0.69	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(K)FLUORANTHENE	7.7		0.69	MDL	1.7	PQL	ug/Kg	J	FD
CHRYSENE	59		0.35	MDL	1.7	PQL	ug/Kg	J	FD
DIBENZO(A,H)ANTHRACENE	3.2		0.69	MDL	1.7	PQL	ug/Kg	J	FD
Di-n-butylphthalate	7.3	J	6.2	MDL	19	PQL	ug/Kg	J	Z
Di-n-octylphthalate	6.5	J	6.2	MDL	19	PQL	ug/Kg	J	Z
FLUORANTHENE	11		0.69	MDL	1.7	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	5.1		0.69	MDL	1.7	PQL	ug/Kg	J	FD
NAPHTHALENE	0.99	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z, FD
PYRENE	15		0.69	MDL	1.7	PQL	ug/Kg	J	FD

Sample ID: SED-025-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 12:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.2	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SED-025-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 12:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.2	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	0.42	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.4	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.5	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.4	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.9	J	6.7	MDL	20	PQL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-054-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:21:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	6.5	J	6.4	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-098-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:43:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.6	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.2	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.0	J	6.2	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.78	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.99	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-105-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.89	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.5	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.1	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.4	J	6.3	MDL	19	PQL	ug/Kg	J	Z
PYRENE	0.89	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-108-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.1	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.90	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.1	J	6.3	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-109-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:09:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.4	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.4	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.7	J	6.4	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-119-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.91	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.87	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.6	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.73	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.7	J	6.5	MDL	19	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.2	J	6.5	MDL	19	PQL	ug/Kg	J	Z
FLUORANTHENE	1.5	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-120-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:47:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.41	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(A)ANTHRACENE	4.3		0.70	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(A)PYRENE	6.2		0.70	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(B)FLUORANTHENE	7.4		0.70	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	6.1		0.70	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(K)FLUORANTHENE	3.8		0.70	MDL	1.7	PQL	ug/Kg	J	FD
CHRYSENE	18		0.35	MDL	1.7	PQL	ug/Kg	J	FD
DIBENZO(A,H)ANTHRACENE	1.2	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-120-SA5B-SS-0.0-0.5 **Collected: 12/14/2010 8:47:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.5	J	6.3	MDL	19	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.0	J	6.3	MDL	19	PQL	ug/Kg	J	Z
FLUORANTHENE	5.8		0.70	MDL	1.7	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	2.9		0.70	MDL	1.7	PQL	ug/Kg	J	FD
NAPHTHALENE	0.70	U	0.70	MDL	1.7	PQL	ug/Kg	UJ	FD
PYRENE	7.0		0.70	MDL	1.7	PQL	ug/Kg	J	FD

Sample ID: SL-122-SA5B-SS-0.0-0.5 **Collected: 12/14/2010 9:40:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.90	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	0.97	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	0.92	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.77	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-123-SA5B-SS-0.0-0.5 **Collected: 12/14/2010 10:40:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	1.0	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	12	J	6.4	MDL	19	PQL	ug/Kg	J	Z
FLUORENE	1.2	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-124-SA5B-SS-0.0-0.5 **Collected: 12/14/2010 11:00:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.82	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.1	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.77	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory:** LL

EDD Filename: PrepDE038_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-142-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 11:04:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.41	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-143-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 11:15:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.57	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	0.88	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-240-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:33:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.0	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	0.81	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	0.96	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-309-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:25:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.52	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.6	J	6.3	MDL	19	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.5	J	6.3	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-310-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.40	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.82	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.7	J	6.3	MDL	19	PQL	ug/Kg	J	Z
PHENANTHRENE	0.99	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-311-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:00:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	6.2	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z
ACENAPHTHENE	4.9	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

Sample ID: SL-312-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:27:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	6.1	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
ACENAPHTHENE	4.6	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.9	J	1.8	MDL	8.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	8.4	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	6.4	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
PHENANTHRENE	4.7	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE038

Method Blank Outlier Report

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35108HB220811	12/29/2010 8:11:00 AM	CALCIUM LITHIUM	7.00 mg/Kg 0.33 mg/Kg	DUP05-SA5B-QC-121410 SED-025-SIV-SD-0.0-0.5 SL-054-SA5B-SS-0.0-0.5 SL-098-SA5B-SS-0.0-0.5 SL-105-SA5B-SS-0.0-0.5 SL-108-SA5B-SS-0.0-0.5 SL-109-SA5B-SS-0.0-0.5 SL-119-SA5B-SS-0.0-0.5 SL-120-SA5B-SS-0.0-0.5 SL-121-SA5B-SS-0.0-0.5 SL-122-SA5B-SS-0.0-0.5 SL-123-SA5B-SS-0.0-0.5 SL-124-SA5B-SS-0.0-0.5 SL-142-SA5B-SS-0.0-0.5 SL-143-SA5B-SS-0.0-0.5 SL-240-SA5B-SS-0.0-0.5 SL-309-SA5B-SS-0.0-0.5 SL-310-SA5B-SS-0.0-0.5 SL-311-SA5B-SS-0.0-0.5 SL-312-SA5B-SS-0.0-0.5
P35108HB221359	12/24/2010 1:59:00 PM	PHOSPHORUS TIN	1.61 mg/Kg 1.55 mg/Kg	DUP05-SA5B-QC-121410 SED-025-SIV-SD-0.0-0.5 SL-054-SA5B-SS-0.0-0.5 SL-098-SA5B-SS-0.0-0.5 SL-105-SA5B-SS-0.0-0.5 SL-108-SA5B-SS-0.0-0.5 SL-109-SA5B-SS-0.0-0.5 SL-119-SA5B-SS-0.0-0.5 SL-120-SA5B-SS-0.0-0.5 SL-121-SA5B-SS-0.0-0.5 SL-122-SA5B-SS-0.0-0.5 SL-123-SA5B-SS-0.0-0.5 SL-124-SA5B-SS-0.0-0.5 SL-142-SA5B-SS-0.0-0.5 SL-143-SA5B-SS-0.0-0.5 SL-240-SA5B-SS-0.0-0.5 SL-309-SA5B-SS-0.0-0.5 SL-310-SA5B-SS-0.0-0.5 SL-311-SA5B-SS-0.0-0.5 SL-312-SA5B-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP05-SA5B-QC-121410(RES)	TIN	1.69 mg/Kg	1.69U mg/Kg
SED-025-SIV-SD-0.0-0.5(RES)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-054-SA5B-SS-0.0-0.5(RES)	TIN	2.78 mg/Kg	2.78U mg/Kg
SL-098-SA5B-SS-0.0-0.5(RES)	TIN	2.25 mg/Kg	2.25U mg/Kg
SL-105-SA5B-SS-0.0-0.5(RES)	TIN	2.60 mg/Kg	2.60U mg/Kg
SL-108-SA5B-SS-0.0-0.5(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-109-SA5B-SS-0.0-0.5(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-119-SA5B-SS-0.0-0.5(RES)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	TIN	2.16 mg/Kg	2.16U mg/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	TIN	2.31 mg/Kg	2.31U mg/Kg
SL-123-SA5B-SS-0.0-0.5(RES)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-124-SA5B-SS-0.0-0.5(RES)	TIN	3.05 mg/Kg	3.05U mg/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	TIN	3.07 mg/Kg	3.07U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE038 | Laboratory: LL

EDD Filename: DE038_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-143-SA5B-SS-0.0-0.5(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-240-SA5B-SS-0.0-0.5(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-309-SA5B-SS-0.0-0.5(RES)	TIN	2.40 mg/Kg	2.40U mg/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	TIN	2.35 mg/Kg	2.35U mg/Kg
SL-311-SA5B-SS-0.0-0.5(RES)	TIN	1.88 mg/Kg	1.88U mg/Kg
SL-312-SA5B-SS-0.0-0.5(RES)	TIN	2.69 mg/Kg	2.69U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35126CB221254A	12/28/2010 12:54:00 PM	COPPER	0.0941 mg/Kg	DUP05-SA5B-QC-121410 SED-025-SIV-SD-0.0-0.5 SL-054-SA5B-SS-0.0-0.5 SL-098-SA5B-SS-0.0-0.5 SL-105-SA5B-SS-0.0-0.5 SL-108-SA5B-SS-0.0-0.5 SL-109-SA5B-SS-0.0-0.5 SL-119-SA5B-SS-0.0-0.5 SL-120-SA5B-SS-0.0-0.5 SL-121-SA5B-SS-0.0-0.5 SL-122-SA5B-SS-0.0-0.5 SL-123-SA5B-SS-0.0-0.5 SL-124-SA5B-SS-0.0-0.5 SL-142-SA5B-SS-0.0-0.5 SL-143-SA5B-SS-0.0-0.5 SL-240-SA5B-SS-0.0-0.5 SL-309-SA5B-SS-0.0-0.5 SL-310-SA5B-SS-0.0-0.5 SL-311-SA5B-SS-0.0-0.5 SL-312-SA5B-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLH35B260738	1/4/2011 7:38:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	6.6 ug/Kg	DUP05-SA5B-QC-121410 SED-025-SIV-SD-0.0-0.5 SL-054-SA5B-SS-0.0-0.5 SL-098-SA5B-SS-0.0-0.5 SL-105-SA5B-SS-0.0-0.5 SL-108-SA5B-SS-0.0-0.5 SL-109-SA5B-SS-0.0-0.5 SL-119-SA5B-SS-0.0-0.5 SL-120-SA5B-SS-0.0-0.5 SL-121-SA5B-SS-0.0-0.5 SL-122-SA5B-SS-0.0-0.5 SL-123-SA5B-SS-0.0-0.5 SL-124-SA5B-SS-0.0-0.5 SL-142-SA5B-SS-0.0-0.5 SL-143-SA5B-SS-0.0-0.5 SL-240-SA5B-SS-0.0-0.5 SL-309-SA5B-SS-0.0-0.5 SL-310-SA5B-SS-0.0-0.5 SL-311-SA5B-SS-0.0-0.5 SL-312-SA5B-SS-0.0-0.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE038 | Laboratory: LL

EDD Filename: DE038_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-120-SA5B-SS-0.0-0.5MS SL-120-SA5B-SS-0.0-0.5MSD (SL-120-SA5B-SS-0.0-0.5)	AROCLOR 1016 AROCLOR 1260	215 186	- 152	29.00-146.00 39.00-149.00	- -	AROCLOR 1016, 1221, 1232 AROCLOR 1242, 1248, 1254, 1260	J (all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-120-SA5B-SS-0.0-0.5MSD (SL-120-SA5B-SS-0.0-0.5)	METHOXYCHLOR	-	163	32.00-147.00	-	METHOXYCHLOR	J(all detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-120-SA5B-SS-0.0-0.5MSD (SL-120-SA5B-SS-0.0-0.5)	DINOSEB	-	-	1.00-44.00	40 (35.00)	DINOSEB	J(all detects)
SL-120-SA5B-SS-0.0-0.5MSD (SL-120-SA5B-SS-0.0-0.5)	DALAPON	-	0	12.00-86.00	200 (50.00)	DALAPON	J(all detects) R(all non-detects)
SL-120-SA5B-SS-0.0-0.5MS SL-120-SA5B-SS-0.0-0.5MSD (SL-120-SA5B-SS-0.0-0.5)	MCPA	27	-	31.00-184.00	59 (50.00)	MCPA	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-120-SA5B-SS-0.0-0.5MS (DUP05-SA5B-QC-121410 SED-025-SIV-SD-0.0-0.5 SL-054-SA5B-SS-0.0-0.5 SL-098-SA5B-SS-0.0-0.5 SL-105-SA5B-SS-0.0-0.5 SL-108-SA5B-SS-0.0-0.5 SL-109-SA5B-SS-0.0-0.5 SL-119-SA5B-SS-0.0-0.5 SL-120-SA5B-SS-0.0-0.5 SL-121-SA5B-SS-0.0-0.5 SL-122-SA5B-SS-0.0-0.5 SL-123-SA5B-SS-0.0-0.5 SL-124-SA5B-SS-0.0-0.5 SL-142-SA5B-SS-0.0-0.5 SL-143-SA5B-SS-0.0-0.5 SL-240-SA5B-SS-0.0-0.5 SL-309-SA5B-SS-0.0-0.5 SL-310-SA5B-SS-0.0-0.5 SL-311-SA5B-SS-0.0-0.5 SL-312-SA5B-SS-0.0-0.5)	ARSENIC VANADIUM	167 134	- -	75.00-125.00 75.00-125.00	- -	ARSENIC VANADIUM	J(all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-120-SA5B-SS-0.0-0.5MS SL-120-SA5B-SS-0.0-0.5MSD (DUP05-SA5B-QC-121410 SED-025-SIV-SD-0.0-0.5 SL-054-SA5B-SS-0.0-0.5 SL-098-SA5B-SS-0.0-0.5 SL-105-SA5B-SS-0.0-0.5 SL-108-SA5B-SS-0.0-0.5 SL-109-SA5B-SS-0.0-0.5 SL-119-SA5B-SS-0.0-0.5 SL-120-SA5B-SS-0.0-0.5 SL-121-SA5B-SS-0.0-0.5 SL-122-SA5B-SS-0.0-0.5 SL-123-SA5B-SS-0.0-0.5 SL-124-SA5B-SS-0.0-0.5 SL-142-SA5B-SS-0.0-0.5 SL-143-SA5B-SS-0.0-0.5 SL-240-SA5B-SS-0.0-0.5 SL-309-SA5B-SS-0.0-0.5 SL-310-SA5B-SS-0.0-0.5 SL-311-SA5B-SS-0.0-0.5 SL-312-SA5B-SS-0.0-0.5)	ANTIMONY	68	67	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-120-SA5B-SS-0.0-0.5MS (DUP05-SA5B-QC-121410 SED-025-SIV-SD-0.0-0.5 SL-054-SA5B-SS-0.0-0.5 SL-098-SA5B-SS-0.0-0.5 SL-105-SA5B-SS-0.0-0.5 SL-108-SA5B-SS-0.0-0.5 SL-109-SA5B-SS-0.0-0.5 SL-119-SA5B-SS-0.0-0.5 SL-120-SA5B-SS-0.0-0.5 SL-121-SA5B-SS-0.0-0.5 SL-122-SA5B-SS-0.0-0.5 SL-123-SA5B-SS-0.0-0.5 SL-124-SA5B-SS-0.0-0.5 SL-142-SA5B-SS-0.0-0.5 SL-143-SA5B-SS-0.0-0.5 SL-240-SA5B-SS-0.0-0.5 SL-309-SA5B-SS-0.0-0.5 SL-310-SA5B-SS-0.0-0.5 SL-311-SA5B-SS-0.0-0.5 SL-312-SA5B-SS-0.0-0.5)	BARIUM	152	-	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**

Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-120-SA5B-SS-0.0-0.5MS **SL-120-SA5B-SS-0.0-0.5MSD** (DUP05-SA5B-QC-121410 SED-025-SIV-SD-0.0-0.5 SL-054-SA5B-SS-0.0-0.5 SL-098-SA5B-SS-0.0-0.5 SL-105-SA5B-SS-0.0-0.5 SL-108-SA5B-SS-0.0-0.5 SL-109-SA5B-SS-0.0-0.5 SL-119-SA5B-SS-0.0-0.5 SL-120-SA5B-SS-0.0-0.5 SL-121-SA5B-SS-0.0-0.5 SL-122-SA5B-SS-0.0-0.5 SL-123-SA5B-SS-0.0-0.5 SL-124-SA5B-SS-0.0-0.5 SL-142-SA5B-SS-0.0-0.5 SL-143-SA5B-SS-0.0-0.5 SL-240-SA5B-SS-0.0-0.5 SL-309-SA5B-SS-0.0-0.5 SL-310-SA5B-SS-0.0-0.5 SL-311-SA5B-SS-0.0-0.5 SL-312-SA5B-SS-0.0-0.5)	ALUMINUM TITANIUM	1443 -	1911 133	75.00-125.00 75.00-125.00	- -	ALUMINUM TITANIUM	J(all detects) Al No Qual, >4x
SL-120-SA5B-SS-0.0-0.5MS **SL-120-SA5B-SS-0.0-0.5MSD** (DUP05-SA5B-QC-121410 SED-025-SIV-SD-0.0-0.5 SL-054-SA5B-SS-0.0-0.5 SL-098-SA5B-SS-0.0-0.5 SL-105-SA5B-SS-0.0-0.5 SL-108-SA5B-SS-0.0-0.5 SL-109-SA5B-SS-0.0-0.5 SL-119-SA5B-SS-0.0-0.5 SL-120-SA5B-SS-0.0-0.5 SL-121-SA5B-SS-0.0-0.5 SL-122-SA5B-SS-0.0-0.5 SL-123-SA5B-SS-0.0-0.5 SL-124-SA5B-SS-0.0-0.5 SL-142-SA5B-SS-0.0-0.5 SL-143-SA5B-SS-0.0-0.5 SL-240-SA5B-SS-0.0-0.5 SL-309-SA5B-SS-0.0-0.5 SL-310-SA5B-SS-0.0-0.5 SL-311-SA5B-SS-0.0-0.5 SL-312-SA5B-SS-0.0-0.5)	CALCIUM IRON MAGNESIUM	-1 -985 14	211 -358 -	75.00-125.00 75.00-125.00 75.00-125.00	35 (20.00) - -	CALCIUM IRON MAGNESIUM	J(all detects) UJ(all non-detects) No Qual %R, >4x
SL-120-SA5B-SS-0.0-0.5MS (DUP05-SA5B-QC-121410 SED-025-SIV-SD-0.0-0.5 SL-054-SA5B-SS-0.0-0.5 SL-098-SA5B-SS-0.0-0.5 SL-105-SA5B-SS-0.0-0.5 SL-108-SA5B-SS-0.0-0.5 SL-109-SA5B-SS-0.0-0.5 SL-119-SA5B-SS-0.0-0.5 SL-120-SA5B-SS-0.0-0.5 SL-121-SA5B-SS-0.0-0.5 SL-122-SA5B-SS-0.0-0.5 SL-123-SA5B-SS-0.0-0.5 SL-124-SA5B-SS-0.0-0.5 SL-142-SA5B-SS-0.0-0.5 SL-143-SA5B-SS-0.0-0.5 SL-240-SA5B-SS-0.0-0.5 SL-309-SA5B-SS-0.0-0.5 SL-310-SA5B-SS-0.0-0.5 SL-311-SA5B-SS-0.0-0.5 SL-312-SA5B-SS-0.0-0.5)	MANGANESE	60	-	75.00-125.00	-	MANGANESE	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-120-SA5B-SS-0.0-0.5MS (SL-120-SA5B-SS-0.0-0.5)	BENZIDINE	28	-	35.00-141.00	-	BENZIDINE	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03548AY240246A (DUP05-SA5B-QC-121410 SED-025-SIV-SD-0.0-0.5 SL-054-SA5B-SS-0.0-0.5 SL-098-SA5B-SS-0.0-0.5 SL-105-SA5B-SS-0.0-0.5 SL-108-SA5B-SS-0.0-0.5 SL-109-SA5B-SS-0.0-0.5 SL-119-SA5B-SS-0.0-0.5 SL-120-SA5B-SS-0.0-0.5 SL-121-SA5B-SS-0.0-0.5 SL-122-SA5B-SS-0.0-0.5 SL-123-SA5B-SS-0.0-0.5 SL-124-SA5B-SS-0.0-0.5 SL-142-SA5B-SS-0.0-0.5 SL-143-SA5B-SS-0.0-0.5 SL-240-SA5B-SS-0.0-0.5 SL-309-SA5B-SS-0.0-0.5 SL-310-SA5B-SS-0.0-0.5 SL-311-SA5B-SS-0.0-0.5 SL-312-SA5B-SS-0.0-0.5)	Aroclor 5442	-	66	75.00-125.00	35 (30.00)	Aroclor 5432, 5442, 5460	J (all detects) UJ (all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03557AQ242112A	4,4'-DDE	143	-	59.00-141.00	-	4,4'-DDE	
(DUP05-SA5B-QC-121410	4,4'-DDT	163	-	54.00-130.00	-	4,4'-DDT	
SED-025-SIV-SD-0.0-0.5	ALDRIN	142	-	44.00-135.00	-	ALDRIN	
SL-054-SA5B-SS-0.0-0.5	ENDRIN	139	-	62.00-129.00	-	ENDRIN	
SL-098-SA5B-SS-0.0-0.5	METHOXYCHLOR	176	-	59.00-125.00	-	METHOXYCHLOR	
SL-105-SA5B-SS-0.0-0.5							
SL-108-SA5B-SS-0.0-0.5							
SL-109-SA5B-SS-0.0-0.5							
SL-119-SA5B-SS-0.0-0.5							
SL-120-SA5B-SS-0.0-0.5							
SL-121-SA5B-SS-0.0-0.5							J(all detects)
SL-122-SA5B-SS-0.0-0.5							
SL-123-SA5B-SS-0.0-0.5							
SL-124-SA5B-SS-0.0-0.5							
SL-142-SA5B-SS-0.0-0.5							
SL-143-SA5B-SS-0.0-0.5							
SL-240-SA5B-SS-0.0-0.5							
SL-309-SA5B-SS-0.0-0.5							
SL-310-SA5B-SS-0.0-0.5							
SL-311-SA5B-SS-0.0-0.5							
SL-312-SA5B-SS-0.0-0.5)							

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

***Method:* 8151A**
***Matrix:* SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P03567AQ241618A (DUP05-SA5B-QC-121410 SED-025-SIV-SD-0.0-0.5 SL-054-SA5B-SS-0.0-0.5 SL-098-SA5B-SS-0.0-0.5 SL-105-SA5B-SS-0.0-0.5 SL-108-SA5B-SS-0.0-0.5 SL-109-SA5B-SS-0.0-0.5 SL-119-SA5B-SS-0.0-0.5 SL-120-SA5B-SS-0.0-0.5 SL-121-SA5B-SS-0.0-0.5 SL-122-SA5B-SS-0.0-0.5 SL-123-SA5B-SS-0.0-0.5 SL-124-SA5B-SS-0.0-0.5 SL-142-SA5B-SS-0.0-0.5 SL-143-SA5B-SS-0.0-0.5 SL-240-SA5B-SS-0.0-0.5 SL-309-SA5B-SS-0.0-0.5 SL-310-SA5B-SS-0.0-0.5 SL-311-SA5B-SS-0.0-0.5 SL-312-SA5B-SS-0.0-0.5)	DINOSEB	9	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-120-SA5B-SS-0.0-0.5DUP (DUP05-SA5B-QC-121410 SL-054-SA5B-SS-0.0-0.5 SL-105-SA5B-SS-0.0-0.5 SL-108-SA5B-SS-0.0-0.5 SL-109-SA5B-SS-0.0-0.5 SL-119-SA5B-SS-0.0-0.5 SL-120-SA5B-SS-0.0-0.5 SL-121-SA5B-SS-0.0-0.5 SL-122-SA5B-SS-0.0-0.5 SL-240-SA5B-SS-0.0-0.5)	FLUORIDE	200	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-120-SA5B-SS-0.0-0.5DUP	LITHIUM	25	20.00	
(DUP05-SA5B-QC-121410	MAGNESIUM	26	20.00	
SED-025-SIV-SD-0.0-0.5	POTASSIUM	22	20.00	
SL-054-SA5B-SS-0.0-0.5	TITANIUM	25	20.00	
SL-098-SA5B-SS-0.0-0.5				
SL-105-SA5B-SS-0.0-0.5				
SL-108-SA5B-SS-0.0-0.5				
SL-109-SA5B-SS-0.0-0.5				
SL-119-SA5B-SS-0.0-0.5				
SL-120-SA5B-SS-0.0-0.5				
SL-121-SA5B-SS-0.0-0.5				J(all detects) UJ(all non-detects)
SL-122-SA5B-SS-0.0-0.5				
SL-123-SA5B-SS-0.0-0.5				
SL-124-SA5B-SS-0.0-0.5				Li No Qual OK by difference
SL-142-SA5B-SS-0.0-0.5				
SL-143-SA5B-SS-0.0-0.5				
SL-240-SA5B-SS-0.0-0.5				
SL-309-SA5B-SS-0.0-0.5				
SL-310-SA5B-SS-0.0-0.5				
SL-311-SA5B-SS-0.0-0.5				
SL-312-SA5B-SS-0.0-0.5)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-120-SA5B-SS-0.0-0.5DUP (DUP05-SA5B-QC-121410 SED -025-SIV-SD-0.0-0.5 SL -054-SA5B-SS-0.0-0.5 SL -098-SA5B-SS-0.0-0.5 SL -105-SA5B-SS-0.0-0.5 SL -108-SA5B-SS-0.0-0.5 SL -109-SA5B-SS-0.0-0.5 SL -119-SA5B-SS-0.0-0.5 SL -120-SA5B-SS-0.0-0.5 SL -121-SA5B-SS-0.0-0.5 SL -122-SA5B-SS-0.0-0.5 SL -123-SA5B-SS-0.0-0.5 SL -124-SA5B-SS-0.0-0.5 SL -142-SA5B-SS-0.0-0.5 SL -143-SA5B-SS-0.0-0.5 SL -240-SA5B-SS-0.0-0.5 SL -309-SA5B-SS-0.0-0.5 SL -310-SA5B-SS-0.0-0.5 SL -311-SA5B-SS-0.0-0.5 SL -312-SA5B-SS-0.0-0.5)	SELENIUM	23	20.00	No Qual OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-120-SA5B-SS-0.0-0.5DUP (DUP05-SA5B-QC-121410 SED -025-SIV-SD-0.0-0.5 SL -054-SA5B-SS-0.0-0.5 SL -098-SA5B-SS-0.0-0.5 SL -105-SA5B-SS-0.0-0.5 SL -108-SA5B-SS-0.0-0.5 SL -109-SA5B-SS-0.0-0.5 SL -119-SA5B-SS-0.0-0.5 SL -120-SA5B-SS-0.0-0.5 SL -121-SA5B-SS-0.0-0.5 SL -122-SA5B-SS-0.0-0.5 SL -123-SA5B-SS-0.0-0.5 SL -124-SA5B-SS-0.0-0.5 SL -142-SA5B-SS-0.0-0.5 SL -143-SA5B-SS-0.0-0.5 SL -240-SA5B-SS-0.0-0.5 SL -309-SA5B-SS-0.0-0.5 SL -310-SA5B-SS-0.0-0.5 SL -311-SA5B-SS-0.0-0.5 SL -312-SA5B-SS-0.0-0.5)	HEXAVALENT CHROMIUM	200	20.00	No Qual OK by difference

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-098-SA5B-SS-0.0-0.5DUP (SED-025-SIV-SD-0.0-0.5 SL -098-SA5B-SS-0.0-0.5 SL -123-SA5B-SS-0.0-0.5 SL -124-SA5B-SS-0.0-0.5 SL -142-SA5B-SS-0.0-0.5 SL -143-SA5B-SS-0.0-0.5 SL -309-SA5B-SS-0.0-0.5 SL -310-SA5B-SS-0.0-0.5 SL -311-SA5B-SS-0.0-0.5 SL -312-SA5B-SS-0.0-0.5)	FLUORIDE	34	20.00	No Qual OK by difference

Surrogate Outlier Report

Lab Reporting Batch ID: DE038 Laboratory: LL

EDD Filename: DE038_v1 eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP05-SA5B-QC-121410	DECACHLOROBIPHENYL	244	20.00-120.00	All Target Analytes	J (all detects)
SL-120-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	162	20.00-120.00	All Target Analytes	J(all detects)
SL-123-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	220	20.00-120.00	All Target Analytes	J(all detects)
SL-124-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	137	20.00-120.00	All Target Analytes	J(all detects)
SL-311-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	141	20.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP05-SA5B-QC-121410	DECACHLOROBIPHENYL	129	45.00-120.00	All Target Analytes	J(all detects)
SL-098-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	128	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-105-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	179 159	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects)
SL-108-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	126	45.00-120.00	All Target Analytes	J(all detects)
SL-119-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	173 159	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects)
SL-120-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	137	45.00-120.00	All Target Analytes	J(all detects)
SL-121-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	140	45.00-120.00	All Target Analytes	J(all detects)
SL-122-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	137 145	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects)
SL-124-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	141	45.00-120.00	All Target Analytes	J(all detects)
SL-142-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	126	45.00-120.00	All Target Analytes	J(all detects)
SL-143-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	J(all detects)

Method: 8151A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-122-SA5B-SS-0.0-0.5	2,4-Dichlorophenylacetic acid	162	36.00-156.00	All Target Analytes	J(all detects)
SL-124-SA5B-SS-0.0-0.5	2,4-Dichlorophenylacetic acid	174	36.00-156.00	All Target Analytes	J(all detects)
SL-311-SA5B-SS-0.0-0.5	2,4-Dichlorophenylacetic acid	226	36.00-156.00	All Target Analytes	J(all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE038 Laboratory: LL

EDD Filename: PrepDE038_v1 eQAPP Name: CDM_SSFL_110509

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA5B-SS-0.0-0.5	DUP05-SA5B-QC-121410			
MOISTURE	4.1	3.4	19		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA5B-SS-0.0-0.5	DUP05-SA5B-QC-121410			
FLUORIDE	1.0 U	1.0	200	50.00	J(all detects) UJ(all non-detects)

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA5B-SS-0.0-0.5	DUP05-SA5B-QC-121410			
ALUMINUM	7750	6070	24	50.00	
BORON	5.91	5.07	15	50.00	
CALCIUM	2070	1870	10	50.00	
IRON	10500	8140	25	50.00	
MAGNESIUM	1850	1170	45	50.00	
MANGANESE	131	94.0	33	50.00	No Qualifiers Applied
PHOSPHORUS	271	232	16	50.00	
POTASSIUM	1440	955	41	50.00	
STRONTIUM	25.0	24.4	2	50.00	
TIN	2.16	1.69	24	50.00	
TITANIUM	404	248	48	50.00	
LITHIUM	7.6	4.4	53	50.00	
SODIUM	49.7	101 U	200	50.00	J(all detects) UJ(all non-detects)
Zirconium	2.17	1.19	58	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA5B-SS-0.0-0.5	DUP05-SA5B-QC-121410			
ANTIMONY	0.155	0.169	9	50.00	
ARSENIC	3.17	4.38	32	50.00	
BARIUM	48.1	56.9	17	50.00	
BERYLLIUM	0.294	0.270	9	50.00	
CADMIUM	0.121	0.180	39	50.00	
CHROMIUM	8.45	9.66	13	50.00	
COBALT	3.77	4.40	15	50.00	
COPPER	5.68	6.39	12	50.00	No Qualifiers Applied
LEAD	5.86	6.89	16	50.00	
MOLYBDENUM	0.310	0.384	21	50.00	
NICKEL	5.49	5.58	2	50.00	
SELENIUM	0.146	0.157	7	50.00	
THALLIUM	0.101	0.0943	7	50.00	
VANADIUM	17.5	20.2	14	50.00	
ZINC	26.3	36.5	32	50.00	
SILVER	0.0154	0.104 U	200	50.00	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA5B-SS-0.0-0.5	DUP05-SA5B-QC-121410			
HEXAVALENT CHROMIUM	1.0 U	2.8	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA5B-SS-0.0-0.5	DUP05-SA5B-QC-121410			
MERCURY	0.0103	0.101 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA5B-SS-0.0-0.5	DUP05-SA5B-QC-121410			
AROCLOR 1254	0.94	1.5	46	50.00	No Qualifiers Applied
AROCLOR 1260	0.91	1.1	19	50.00	
Aroclor 5460	1.9	3.4 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA5B-SS-0.0-0.5	DUP05-SA5B-QC-121410			
2,4-DB	3.9	6.2	46	50.00	No Qualifiers Applied
MCPA	720	820	13	50.00	
MCPP	200	260 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA5B-SS-0.0-0.5	DUP05-SA5B-QC-121410			
Di-n-butylphthalate	6.5	7.3	12	50.00	No Qualifiers Applied
Di-n-octylphthalate	9.0	6.5	32	50.00	
PHENANTHRENE	2.3	3.7	47	50.00	
ANTHRACENE	0.41	0.69	51	50.00	J(all detects) UJ(all non-detects)
BENZO(A)ANTHRACENE	4.3	10	80	50.00	
BENZO(A)PYRENE	6.2	16	88	50.00	
BENZO(B)FLUORANTHENE	7.4	22	99	50.00	
BENZO(G,H,I)PERYLENE	6.1	16	90	50.00	
BENZO(K)FLUORANTHENE	3.8	7.7	68	50.00	
CHRYSENE	18	59	106	50.00	
DIBENZO(A,H)ANTHRACENE	1.2	3.2	91	50.00	
FLUORANTHENE	5.8	11	62	50.00	
INDENO(1,2,3-CD)PYRENE	2.9	5.1	55	50.00	
NAPHTHALENE	1.7 U	0.99	200	50.00	
PYRENE	7.0	15	73	50.00	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: PrepDE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA5B-SS-0.0-0.5	DUP05-SA5B-QC-121410			
PH	8.38	7.88	6	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA5B-SS-0.0-0.5	DUP05-SA5B-QC-121410			
Oxidation Reduction Potential	414	415	0		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP05-SA5B-QC-121410	TIN	J	1.69	10.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.19	5.03	PQL	mg/Kg	
SED-025-SIV-SD-0.0-0.5	SODIUM	J	67.1	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.54	10.8	PQL	mg/Kg	
	Zirconium	J	1.29	5.42	PQL	mg/Kg	
SL-054-SA5B-SS-0.0-0.5	TIN	J	2.78	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.62	5.18	PQL	mg/Kg	
SL-098-SA5B-SS-0.0-0.5	TIN	J	2.25	10.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.40	5.11	PQL	mg/Kg	
SL-105-SA5B-SS-0.0-0.5	TIN	J	2.60	10.3	PQL	mg/Kg	J (all detects)
SL-108-SA5B-SS-0.0-0.5	TIN	J	2.61	10.3	PQL	mg/Kg	J (all detects)
SL-109-SA5B-SS-0.0-0.5	TIN	J	2.66	10.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.54	5.10	PQL	mg/Kg	
SL-119-SA5B-SS-0.0-0.5	SODIUM	J	98.1	105	PQL	mg/Kg	J (all detects)
	TIN	J	3.09	10.5	PQL	mg/Kg	
	Zirconium	J	1.08	5.25	PQL	mg/Kg	
SL-120-SA5B-SS-0.0-0.5	SODIUM	J	49.7	103	PQL	mg/Kg	J (all detects)
	TIN	J	2.16	10.3	PQL	mg/Kg	
	Zirconium	J	2.17	5.16	PQL	mg/Kg	
SL-121-SA5B-SS-0.0-0.5	SODIUM	J	86.8	104	PQL	mg/Kg	J (all detects)
	TIN	J	2.53	10.4	PQL	mg/Kg	
	Zirconium	J	1.93	5.20	PQL	mg/Kg	
SL-122-SA5B-SS-0.0-0.5	SODIUM	J	70.0	105	PQL	mg/Kg	J (all detects)
	TIN	J	2.31	10.5	PQL	mg/Kg	
	Zirconium	J	1.81	5.24	PQL	mg/Kg	
SL-123-SA5B-SS-0.0-0.5	SODIUM	J	75.6	102	PQL	mg/Kg	J (all detects)
	TIN	J	2.76	10.2	PQL	mg/Kg	
	Zirconium	J	1.69	5.12	PQL	mg/Kg	
SL-124-SA5B-SS-0.0-0.5	SODIUM	J	83.6	102	PQL	mg/Kg	J (all detects)
	TIN	J	3.05	10.2	PQL	mg/Kg	
	Zirconium	J	2.30	5.12	PQL	mg/Kg	
SL-142-SA5B-SS-0.0-0.5	SODIUM	J	77.6	105	PQL	mg/Kg	J (all detects)
	TIN	J	3.07	10.5	PQL	mg/Kg	
	Zirconium	J	1.88	5.23	PQL	mg/Kg	
SL-143-SA5B-SS-0.0-0.5	SODIUM	J	70.1	103	PQL	mg/Kg	J (all detects)
	TIN	J	2.62	10.3	PQL	mg/Kg	
	Zirconium	J	1.72	5.14	PQL	mg/Kg	
SL-240-SA5B-SS-0.0-0.5	TIN	J	2.62	10.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.11	5.01	PQL	mg/Kg	
SL-309-SA5B-SS-0.0-0.5	TIN	J	2.40	10.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.25	5.16	PQL	mg/Kg	
SL-310-SA5B-SS-0.0-0.5	TIN	J	2.35	10.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.64	5.17	PQL	mg/Kg	
SL-311-SA5B-SS-0.0-0.5	TIN	J	1.88	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.31	5.36	PQL	mg/Kg	
SL-312-SA5B-SS-0.0-0.5	TIN	J	2.69	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.60	5.21	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP05-SA5B-QC-121410	ANTIMONY	J	0.169	0.207	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.157	0.414	PQL	mg/Kg	
	THALLIUM	J	0.0943	0.104	PQL	mg/Kg	
SED-025-SIV-SD-0.0-0.5	ANTIMONY	J	0.136	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.160	0.438	PQL	mg/Kg	
	SILVER	J	0.0400	0.109	PQL	mg/Kg	
SL-054-SA5B-SS-0.0-0.5	SELENIUM	J	0.104	0.422	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0379	0.106	PQL	mg/Kg	
SL-098-SA5B-SS-0.0-0.5	ANTIMONY	J	0.126	0.203	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0689	0.405	PQL	mg/Kg	
	SILVER	J	0.0257	0.101	PQL	mg/Kg	
SL-105-SA5B-SS-0.0-0.5	ANTIMONY	J	0.144	0.205	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0577	0.409	PQL	mg/Kg	
	SILVER	J	0.0340	0.102	PQL	mg/Kg	
SL-108-SA5B-SS-0.0-0.5	ANTIMONY	J	0.149	0.207	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0656	0.414	PQL	mg/Kg	
	SILVER	J	0.0221	0.104	PQL	mg/Kg	
SL-109-SA5B-SS-0.0-0.5	ANTIMONY	J	0.127	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0757	0.412	PQL	mg/Kg	
	SILVER	J	0.0289	0.103	PQL	mg/Kg	
SL-119-SA5B-SS-0.0-0.5	SELENIUM	J	0.161	0.429	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0445	0.107	PQL	mg/Kg	
SL-120-SA5B-SS-0.0-0.5	ANTIMONY	J	0.155	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.146	0.413	PQL	mg/Kg	
	SILVER	J	0.0154	0.103	PQL	mg/Kg	
	THALLIUM	J	0.101	0.103	PQL	mg/Kg	
SL-121-SA5B-SS-0.0-0.5	ANTIMONY	J	0.154	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.158	0.416	PQL	mg/Kg	
	SILVER	J	0.0291	0.104	PQL	mg/Kg	
SL-122-SA5B-SS-0.0-0.5	ANTIMONY	J	0.103	0.204	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.120	0.407	PQL	mg/Kg	
	SILVER	J	0.0169	0.102	PQL	mg/Kg	
SL-123-SA5B-SS-0.0-0.5	SELENIUM	J	0.209	0.418	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0993	0.104	PQL	mg/Kg	
SL-124-SA5B-SS-0.0-0.5	SELENIUM	J	0.181	0.418	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0973	0.104	PQL	mg/Kg	
SL-142-SA5B-SS-0.0-0.5	ANTIMONY	J	0.125	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.144	0.422	PQL	mg/Kg	
	SILVER	J	0.0225	0.106	PQL	mg/Kg	
SL-143-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0659	0.206	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0929	0.103	PQL	mg/Kg	
	SELENIUM	J	0.112	0.411	PQL	mg/Kg	
	SILVER	J	0.0330	0.103	PQL	mg/Kg	
SL-240-SA5B-SS-0.0-0.5	ANTIMONY	J	0.113	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0812	0.413	PQL	mg/Kg	
	SILVER	J	0.0304	0.103	PQL	mg/Kg	
SL-309-SA5B-SS-0.0-0.5	SELENIUM	J	0.135	0.401	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0146	0.100	PQL	mg/Kg	
SL-310-SA5B-SS-0.0-0.5	SELENIUM	J	0.0956	0.422	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0217	0.105	PQL	mg/Kg	
SL-311-SA5B-SS-0.0-0.5	SELENIUM	J	0.232	0.421	PQL	mg/Kg	J (all detects)
	SILVER	J	0.103	0.105	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-312-SA5B-SS-0.0-0.5	ANTIMONY	J	0.142	0.204	PQL	mg/Kg	
	SELENIUM	J	0.157	0.409	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0648	0.102	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-054-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.49	1.1	PQL	mg/Kg	J (all detects)
SL-108-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.52	1.0	PQL	mg/Kg	J (all detects)
SL-119-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.57	1.1	PQL	mg/Kg	J (all detects)
SL-121-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.43	1.1	PQL	mg/Kg	J (all detects)
SL-122-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.43	1.1	PQL	mg/Kg	J (all detects)
SL-123-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.66	1.1	PQL	mg/Kg	J (all detects)
SL-124-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.59	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-025-SIV-SD-0.0-0.5	MERCURY	J	0.0102	0.110	PQL	mg/Kg	J (all detects)
SL-054-SA5B-SS-0.0-0.5	MERCURY	J	0.0220	0.102	PQL	mg/Kg	J (all detects)
SL-098-SA5B-SS-0.0-0.5	MERCURY	J	0.0248	0.101	PQL	mg/Kg	J (all detects)
SL-105-SA5B-SS-0.0-0.5	MERCURY	J	0.0207	0.0979	PQL	mg/Kg	J (all detects)
SL-108-SA5B-SS-0.0-0.5	MERCURY	J	0.0376	0.102	PQL	mg/Kg	J (all detects)
SL-109-SA5B-SS-0.0-0.5	MERCURY	J	0.0156	0.0995	PQL	mg/Kg	J (all detects)
SL-120-SA5B-SS-0.0-0.5	MERCURY	J	0.0103	0.103	PQL	mg/Kg	J (all detects)
SL-121-SA5B-SS-0.0-0.5	MERCURY	J	0.0048	0.0990	PQL	mg/Kg	J (all detects)
SL-122-SA5B-SS-0.0-0.5	MERCURY	J	0.0044	0.0988	PQL	mg/Kg	J (all detects)
SL-123-SA5B-SS-0.0-0.5	MERCURY	J	0.0225	0.0995	PQL	mg/Kg	J (all detects)
SL-124-SA5B-SS-0.0-0.5	MERCURY	J	0.0143	0.105	PQL	mg/Kg	J (all detects)
SL-142-SA5B-SS-0.0-0.5	MERCURY	J	0.0042	0.102	PQL	mg/Kg	J (all detects)
SL-240-SA5B-SS-0.0-0.5	MERCURY	J	0.0229	0.102	PQL	mg/Kg	J (all detects)
SL-309-SA5B-SS-0.0-0.5	MERCURY	J	0.0061	0.0985	PQL	mg/Kg	J (all detects)
SL-310-SA5B-SS-0.0-0.5	MERCURY	J	0.0067	0.104	PQL	mg/Kg	J (all detects)
SL-311-SA5B-SS-0.0-0.5	MERCURY	J	0.0132	0.107	PQL	mg/Kg	J (all detects)
SL-312-SA5B-SS-0.0-0.5	MERCURY	J	0.0077	0.101	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-119-SA5B-SS-0.0-0.5	DELTA-BHC	J	0.051	0.18	PQL	ug/Kg	J (all detects)
SL-121-SA5B-SS-0.0-0.5	4,4'-DDE HEPTACHLOR EPOXIDE	J J	0.093 0.13	0.36 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-123-SA5B-SS-0.0-0.5	DELTA-BHC	J	0.12	0.18	PQL	ug/Kg	J (all detects)
SL-142-SA5B-SS-0.0-0.5	4,4'-DDT HEPTACHLOR EPOXIDE	J J	0.13 0.15	0.36 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP05-SA5B-QC-121410	AROCLOR 1254 AROCLOR 1260	J J	1.5 1.1	1.8 1.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SED-025-SIV-SD-0.0-0.5	AROCLOR 1254	J	1.2	1.9	PQL	ug/Kg	J (all detects)
SL-054-SA5B-SS-0.0-0.5	AROCLOR 1260	J	1.5	1.8	PQL	ug/Kg	J (all detects)
SL-098-SA5B-SS-0.0-0.5	AROCLOR 1254	J	4.9	18	PQL	ug/Kg	J (all detects)
SL-105-SA5B-SS-0.0-0.5	Aroclor 5460	J	4.6	6.9	PQL	ug/Kg	J (all detects)
SL-108-SA5B-SS-0.0-0.5	Aroclor 5460	J	3.3	3.5	PQL	ug/Kg	J (all detects)
SL-109-SA5B-SS-0.0-0.5	Aroclor 5460	J	2.4	3.5	PQL	ug/Kg	J (all detects)
SL-119-SA5B-SS-0.0-0.5	Aroclor 5460	J	3.8	7.1	PQL	ug/Kg	J (all detects)
SL-120-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	0.94 0.91 1.9	1.8 1.8 3.4	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-122-SA5B-SS-0.0-0.5	AROCLOR 1260	J	1.0	1.8	PQL	ug/Kg	J (all detects)
SL-143-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	0.67 0.51 1.1	1.8 1.8 3.4	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-309-SA5B-SS-0.0-0.5	AROCLOR 1260	J	0.86	1.8	PQL	ug/Kg	J (all detects)
SL-310-SA5B-SS-0.0-0.5	AROCLOR 1260	J	1.7	1.8	PQL	ug/Kg	J (all detects)
SL-312-SA5B-SS-0.0-0.5	AROCLOR 1254	J	1.0	1.8	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-025-SIV-SD-0.0-0.5	2,4-D	J	1.4	4.0	PQL	ug/Kg	J (all detects)
SL-054-SA5B-SS-0.0-0.5	2,4-DB	J	1.6	1.8	PQL	ug/Kg	J (all detects)
SL-098-SA5B-SS-0.0-0.5	MCPP	J	150	260	PQL	ug/Kg	J (all detects)
SL-120-SA5B-SS-0.0-0.5	MCPP	J	200	260	PQL	ug/Kg	J (all detects)
SL-122-SA5B-SS-0.0-0.5	MCPP	J	240	260	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE038 Laboratory: LL

EDD Filename: DE038_v1 eQAPP Name: CDM_SSFL_110509

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-123-SA5B-SS-0.0-0.5	DICAMBA	J	0.51	1.3	PQL	ug/Kg	J (all detects)
	MCPP	J	240	270	PQL	ug/Kg	
SL-142-SA5B-SS-0.0-0.5	2,4-DB	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	MCPP	J	91	270	PQL	ug/Kg	
SL-240-SA5B-SS-0.0-0.5	MCPP	J	150	260	PQL	ug/Kg	J (all detects)
SL-309-SA5B-SS-0.0-0.5	2,4-DB	J	0.70	1.8	PQL	ug/Kg	J (all detects)
SL-310-SA5B-SS-0.0-0.5	MCPA	J	98	260	PQL	ug/Kg	J (all detects)
SL-312-SA5B-SS-0.0-0.5	2,4-DB	J	1.6	1.8	PQL	ug/Kg	J (all detects)
	MCPP	J	81	260	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-054-SA5B-SS-0.0-0.5	ANTHRACENE	J	30	180	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	110	180	PQL	ug/Kg	
	BENZO(A)PYRENE	J	69	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	74	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	31	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	32	180	PQL	ug/Kg	
	CHRYSENE	J	130	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	32	180	PQL	ug/Kg	
	PHENANTHRENE	J	75	180	PQL	ug/Kg	
SL-108-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	37	350	PQL	ug/Kg	J (all detects)
SL-109-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	350	PQL	ug/Kg	J (all detects)
SL-119-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	360	PQL	ug/Kg	J (all detects)
SL-123-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	89	350	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	21	180	PQL	ug/Kg	
	FLUORANTHENE	J	33	180	PQL	ug/Kg	
	PHENANTHRENE	J	22	180	PQL	ug/Kg	
	PYRENE	J	30	180	PQL	ug/Kg	
SL-309-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	20	170	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	18	170	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	17	170	PQL	ug/Kg	
	FLUORANTHENE	J	18	170	PQL	ug/Kg	
	PYRENE	J	23	170	PQL	ug/Kg	
SL-312-SA5B-SS-0.0-0.5	Dimethylphthalate	J	19	180	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP05-SA5B-QC-121410	ANTHRACENE	J	0.69	1.7	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	7.3	19	PQL	ug/Kg	
	Di-n-octylphthalate	J	6.5	19	PQL	ug/Kg	
	NAPHTHALENE	J	0.99	1.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-025-SIV-SD-0.0-0.5	1-METHYLNAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	
	ANTHRACENE	J	0.42	1.9	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.5	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.4	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.9	20	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	1.9	PQL	ug/Kg	
SL-054-SA5B-SS-0.0-0.5	Di-n-octylphthalate	J	6.5	19	PQL	ug/Kg	J (all detects)
SL-098-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.6	1.7	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.1	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.2	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.0	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.78	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.99	1.7	PQL	ug/Kg	
SL-105-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.89	1.7	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.5	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.1	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.4	19	PQL	ug/Kg	
	PYRENE	J	0.89	1.7	PQL	ug/Kg	
SL-108-SA5B-SS-0.0-0.5	ANTHRACENE	J	1.1	1.7	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	0.90	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.1	19	PQL	ug/Kg	
SL-109-SA5B-SS-0.0-0.5	ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	6.7	19	PQL	ug/Kg	
SL-119-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.91	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.87	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.73	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.7	19	PQL	ug/Kg	
	Di-n-octylphthalate	J	7.2	19	PQL	ug/Kg	
	FLUORANTHENE	J	1.5	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
SL-120-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.41	1.7	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.2	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	6.5	19	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.0	19	PQL	ug/Kg	
SL-122-SA5B-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.90	1.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.97	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	0.92	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.77	1.8	PQL	ug/Kg	
	PYRENE	J	1.0	1.8	PQL	ug/Kg	
SL-123-SA5B-SS-0.0-0.5	ACENAPHTHYLENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	12	19	PQL	ug/Kg	
	FLUORENE	J	1.2	1.8	PQL	ug/Kg	
SL-124-SA5B-SS-0.0-0.5	CHRYSENE	J	0.82	1.8	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.77	1.8	PQL	ug/Kg	
	PYRENE	J	1.2	1.8	PQL	ug/Kg	
SL-142-SA5B-SS-0.0-0.5	CHRYSENE	J	0.41	1.8	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE038 **Laboratory: LL**

EDD Filename: DE038_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-143-SA5B-SS-0.0-0.5	CHRYSENE	J	0.57	1.7	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	1.1	1.7	PQL	ug/Kg	
	PYRENE	J	0.88	1.7	PQL	ug/Kg	
SL-240-SA5B-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.0	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.81	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	0.96	1.7	PQL	ug/Kg	
	PYRENE	J	1.2	1.7	PQL	ug/Kg	
SL-309-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.52	1.7	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	7.6	19	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.5	19	PQL	ug/Kg	
SL-310-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.40	1.8	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	0.82	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	6.7	19	PQL	ug/Kg	
	PHENANTHRENE	J	0.99	1.8	PQL	ug/Kg	
SL-311-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	6.2	9.0	PQL	ug/Kg	J (all detects)
	ACENAPHTHENE	J	4.9	9.0	PQL	ug/Kg	
SL-312-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	6.1	8.8	PQL	ug/Kg	J (all detects)
	ACENAPHTHENE	J	4.6	8.8	PQL	ug/Kg	
	ANTHRACENE	J	1.9	8.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	8.4	8.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	6.4	8.8	PQL	ug/Kg	
	PHENANTHRENE	J	4.7	8.8	PQL	ug/Kg	

LDC #: 25550A4 **VALIDATION COMPLETENESS WORKSHEET** Date: 6/6/11
SDG #: DE038 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CR
2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg >4x)
VII.	Duplicate Sample Analysis	N	Dup L: <5x
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A (A) [Ba, Ca, V]
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	DUP05-SA5B-QC-121410	11	SL-098-SA5B-SS-0.0-0.5	21	SL-120-SA5B-SS-0.0-0.5MS	31	
2	SL-120-SA5B-SS-0.0-0.5	12	SL-142-SA5B-SS-0.0-0.5	22	SL-120-SA5B-SS-0.0-0.5MSD	32	
3	SL-108-SA5B-SS-0.0-0.5	13	SL-143-SA5B-SS-0.0-0.5	23	SL-120-SA5B-SS-0.0-0.5DUP	33	
4	SL-119-SA5B-SS-0.0-0.5	14	SL-123-SA5B-SS-0.0-0.5	24		34	
5	SL-240-SA5B-SS-0.0-0.5	15	SL-124-SA5B-SS-0.0-0.5	25		35	
6	SL-109-SA5B-SS-0.0-0.5	16	SL-309-SA5B-SS-0.0-0.5	26		36	
7	SL-122-SA5B-SS-0.0-0.5	17	SL-311-SA5B-SS-0.0-0.5	27		37	
8	SL-121-SA5B-SS-0.0-0.5	18	SL-310-SA5B-SS-0.0-0.5	28		38	
9	SL-054-SA5B-SS-0.0-0.5	19	SL-312-SA5B-SS-0.0-0.5	29		39	
10	SL-105-SA5B-SS-0.0-0.5	20	SED-025-SIV-SD-0.0-0.5	30		40	

Notes:

LDC #: 25550A4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer:

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-20		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr

LDC #: 25550A4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x ICPMS (2dil)
Sample Concentration units, unless otherwise noted: ug/L Associated Samples: All Reason: B

Analyte	Maximum ICB/CCB[a] (ug/L)	Action Limit	1																
Sn	3.5	1.75	1.7																

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE038
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6164622BKG Serial Dilution Lab Sample ID: 6164622L
Batch ID(s): P35108H, P35126C
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		75083.8600		75125.5500		0		P
Antimony	121	0.7505	B	1.5000	U	100		MS
Arsenic	75	15.3700		14.9150		3		MS
Barium	137	232.8000		259.7500		12	E	MS
Beryllium	9	1.4260		1.4850	B	4		MS
Boron		57.2600		78.4000	B	37		P
Cadmium	111	0.5862		1.1705	B	100		MS
Calcium		20054.8600		20420.0500		2		P
Chromium	52	40.9000		43.1200		5		MS
Cobalt	59	18.2500		22.7950		25	E	MS
Copper	63	27.5000		29.9350		9		MS
Iron		101220.8000		104403.4000		3		P
Lead	208	28.3600		31.2850		10		MS
Lithium		73.3000		89.0500	B	21		P
Magnesium		17870.5800		17791.9000		0		P
Manganese		1270.6400		1351.8500		6		P
Molybdenum	98	1.5020		1.7045	B	13		MS
Nickel	60	26.6000		30.8550		16		MS
Phosphorus		2627.6600		2747.8500		5		P
Potassium		13921.1800		13905.4500		0		P
Selenium	78	0.7048	B	1.0000	U	100		MS
Silver	107	0.0748	B	0.3000	U	100		MS
Sodium		481.7800	B	1865.0000	U	100		P
Strontium		242.6000		246.0500		1		P
Thallium	203	0.4885	B	0.7500	U	100		MS
Tin		20.8800	B	50.0000	U	100		P
Titanium		3909.2500		4013.4000		3		P
Vanadium	51	84.8300		103.1500		22	E	MS
Zinc	66	127.3000		129.7500		2		MS
Zirconium		21.0000	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

DE038 3943

SAMPLE DELIVERY GROUP

DE039

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	3050B	6010B	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	3050B	6020	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	3060A	7199	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	3546	1625C	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	3550B	8015B	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	3550B	8015M	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	3550B	8082	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	3550B	8270C	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	3550B	8270C SIM	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	5035	8015M	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	5035	8260B	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	5035	8260B SIM	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	8330	8330A	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	Gen Prep	8315M	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	Gen Prep	9045M	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	METHOD	300.0	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	METHOD	314.0	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	METHOD	7471A	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	METHOD	8015B	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	METHOD	8015M	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	METHOD	8315A	III
02-Dec-2010	DUP10-SA5C-QC-120210	6154849	FD	METHOD	9012B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	3050B	6010B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	3050B	6020	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	3060A	7199	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	3546	1625C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	3550B	8015B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	3550B	8015M	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	3550B	8082	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	3550B	8270C	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	3550B	8270C SIM	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	5035	8015M	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	5035	8260B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	5035	8260B SIM	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	8330	8330A	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	Gen Prep	8315M	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	Gen Prep	9045M	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	METHOD	300.0	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	METHOD	314.0	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	METHOD	7471A	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	METHOD	8015B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	METHOD	8015M	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	METHOD	8315A	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5	6154843	N	METHOD	9012B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	3050B	6010B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	3050B	6020	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	3060A	7199	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	3546	1625C	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	3550B	8015B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	3550B	8015M	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	3550B	8082	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	3550B	8270C SIM	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	5035	8015M	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	5035	8260B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	5035	8260B SIM	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	8330	8330A	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	Gen Prep	8315M	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	METHOD	300.0	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	METHOD	314.0	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	METHOD	7471A	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	METHOD	8015B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	METHOD	8015M	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	METHOD	8315A	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MS	6154844	MS	METHOD	9012B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	3050B	6010B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	3050B	6020	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	3546	1625C	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	3550B	8015B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	3550B	8015M	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	3550B	8082	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	3550B	8270C	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	3550B	8270C SIM	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	5035	8015M	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	5035	8260B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	5035	8260B SIM	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	8330	8330A	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	Gen Prep	8315M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	METHOD	314.0	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	METHOD	7471A	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	METHOD	8015B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	METHOD	8015M	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5MSD	6154845	MSD	METHOD	8315A	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5DUP	6154846	DUP	3050B	6010B	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5DUP	6154846	DUP	3050B	6020	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5DUP	6154846	DUP	3060A	7199	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5DUP	6154846	DUP	Gen Prep	9045M	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5DUP	6154846	DUP	METHOD	300.0	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5DUP	6154846	DUP	METHOD	314.0	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5DUP	6154846	DUP	METHOD	7471A	III
02-Dec-2010	SL-037-SA5C-SB-3.5-4.5DUP	6154846	DUP	METHOD	9012B	III
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0	6154851	N	3050B	6010B	III
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0	6154851	N	3050B	6020	III
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0	6154851	N	3060A	7199	III
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0	6154851	N	3550B	8082	III
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0	6154851	N	3550B	8270C	III
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0	6154851	N	3550B	8270C SIM	III
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0	6154851	N	5035	8260B	III
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0	6154851	N	5035	8260B SIM	III
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0	6154851	N	Gen Prep	9045M	III
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0	6154851	N	METHOD	300.0	III
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0	6154851	N	METHOD	314.0	III
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0	6154851	N	METHOD	7471A	III
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0DUP	P154851D271411A	DUP	METHOD	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Dec-2010	SL-040-SA5C-SB-4.0-5.0MS	P154851R271426A	MS	METHOD	300.0	III
02-Dec-2010	SL-040-SA5C-SB-9.0-10.0	6154852	N	3050B	6010B	III
02-Dec-2010	SL-040-SA5C-SB-9.0-10.0	6154852	N	3050B	6020	III
02-Dec-2010	SL-040-SA5C-SB-9.0-10.0	6154852	N	3060A	7199	III
02-Dec-2010	SL-040-SA5C-SB-9.0-10.0	6154852	N	3550B	8082	III
02-Dec-2010	SL-040-SA5C-SB-9.0-10.0	6154852	N	3550B	8270C	III
02-Dec-2010	SL-040-SA5C-SB-9.0-10.0	6154852	N	3550B	8270C SIM	III
02-Dec-2010	SL-040-SA5C-SB-9.0-10.0	6154852	N	Gen Prep	9045M	III
02-Dec-2010	SL-040-SA5C-SB-9.0-10.0	6154852	N	METHOD	300.0	III
02-Dec-2010	SL-040-SA5C-SB-9.0-10.0	6154852	N	METHOD	314.0	III
02-Dec-2010	SL-040-SA5C-SB-9.0-10.0	6154852	N	METHOD	6850	III
02-Dec-2010	SL-040-SA5C-SB-9.0-10.0	6154852	N	METHOD	7471A	III
02-Dec-2010	TB-120210	6154850	TB	5030B	8015M	III
02-Dec-2010	TB-120210	6154850	TB	5030B	8260B	III
02-Dec-2010	TB-120210	6154850	TB	5030B	8260B SIM	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	3050B	6010B	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	3050B	6020	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	3060A	7199	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	3546	1625C	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	3550B	8015B	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	3550B	8015M	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	3550B	8082	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	3550B	8270C	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	3550B	8270C SIM	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	5035	8015M	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	5035	8260B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	5035	8260B SIM	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	8330	8330A	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	Gen Prep	9045M	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	METHOD	300.0	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	METHOD	314.0	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	METHOD	6850	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	METHOD	7471A	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	METHOD	8015B	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	METHOD	8015M	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	METHOD	8315A	III
02-Dec-2010	SL-039-SA5C-SB-4.0-5.0	6154847	N	METHOD	9012B	III
02-Dec-2010	SL-036-SA5C-SB-4.0-5.0	6154848	N	3050B	6010B	III
02-Dec-2010	SL-036-SA5C-SB-4.0-5.0	6154848	N	3050B	6020	III
02-Dec-2010	SL-036-SA5C-SB-4.0-5.0	6154848	N	3060A	7199	III
02-Dec-2010	SL-036-SA5C-SB-4.0-5.0	6154848	N	3550B	8082	III
02-Dec-2010	SL-036-SA5C-SB-4.0-5.0	6154848	N	3550B	8270C	III
02-Dec-2010	SL-036-SA5C-SB-4.0-5.0	6154848	N	3550B	8270C SIM	III
02-Dec-2010	SL-036-SA5C-SB-4.0-5.0	6154848	N	5035	8260B	III
02-Dec-2010	SL-036-SA5C-SB-4.0-5.0	6154848	N	5035	8260B SIM	III
02-Dec-2010	SL-036-SA5C-SB-4.0-5.0	6154848	N	Gen Prep	9045M	III
02-Dec-2010	SL-036-SA5C-SB-4.0-5.0	6154848	N	METHOD	300.0	III
02-Dec-2010	SL-036-SA5C-SB-4.0-5.0	6154848	N	METHOD	314.0	III
02-Dec-2010	SL-036-SA5C-SB-4.0-5.0	6154848	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE027 Laboratory: LL

EDD Filename: PrepDE027_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-039-SA5C-SB-4.0-5.0 *Collected:* 12/2/2010 2:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.4	J	0.86	MDL	1.6	PQL	mg/Kg	J	Z

Method Category: GENCHEM

Method: 314.0 **Matrix:** SO

Sample ID: DUP10-SA5C-QC-120210 *Collected:* 12/2/2010 9:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	11.5	U	11.5	MDL	38.4	PQL	ug/Kg	UJ	FD

Sample ID: SL-036-SA5C-SB-4.0-5.0 *Collected:* 12/2/2010 4:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	21.9	J	10.3	MDL	34.5	PQL	ug/Kg	J	Z

Sample ID: SL-037-SA5C-SB-3.5-4.5 *Collected:* 12/2/2010 9:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	11.3	J	10.3	MDL	34.2	PQL	ug/Kg	J	Z, FD

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP10-SA5C-QC-120210 *Collected:* 12/2/2010 9:42:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	46300		29.3	MDL	124	PQL	mg/Kg	J	FD

Sample ID: DUP10-SA5C-QC-120210 *Collected:* 12/2/2010 9:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	33000		6.25	MDL	24.9	PQL	mg/Kg	J	FD
CALCIUM	8060		7.62	MDL	24.9	PQL	mg/Kg	J	FD, A
LITHIUM	65.9		0.27	MDL	2.5	PQL	mg/Kg	J	FD
MAGNESIUM	8570		3.16	MDL	12.4	PQL	mg/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE027 Laboratory: LL

EDD Filename: PrepDE027_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP10-SA5C-QC-120210 *Collected:* 12/2/2010 9:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	552		0.696	MDL	12.4	PQL	mg/Kg	J	Q, E
SODIUM	464		46.4	MDL	124	PQL	mg/Kg	J	FD
STRONTIUM	38.6		0.0771	MDL	0.622	PQL	mg/Kg	J	FD
TIN	4.25	J	1.24	MDL	12.4	PQL	mg/Kg	U	B
Zirconium	7.64		1.04	MDL	6.22	PQL	mg/Kg	J	FD

Sample ID: SL-036-SA5C-SB-4.0-5.0 *Collected:* 12/2/2010 4:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	1950		6.84	MDL	22.3	PQL	mg/Kg	J	A
PHOSPHORUS	103		0.625	MDL	11.2	PQL	mg/Kg	J	Q, E
TIN	2.82	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	3.34	J	0.937	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5C-SB-3.5-4.5 *Collected:* 12/2/2010 9:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	10400		5.57	MDL	22.2	PQL	mg/Kg	J	FD
CALCIUM	3030		6.79	MDL	22.2	PQL	mg/Kg	J	FD, A
IRON	19200		5.22	MDL	22.2	PQL	mg/Kg	J	FD
LITHIUM	27.3		0.24	MDL	2.2	PQL	mg/Kg	J	FD
MAGNESIUM	4050		2.82	MDL	11.1	PQL	mg/Kg	J	FD
PHOSPHORUS	422		0.621	MDL	11.1	PQL	mg/Kg	J	Q, E
SODIUM	102	J	41.3	MDL	111	PQL	mg/Kg	J	Z, FD
STRONTIUM	13.4		0.0687	MDL	0.554	PQL	mg/Kg	J	FD
TIN	2.88	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.81	J	0.931	MDL	5.54	PQL	mg/Kg	J	Z, FD

Sample ID: SL-039-SA5C-SB-4.0-5.0 *Collected:* 12/2/2010 2:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	1870		6.54	MDL	21.3	PQL	mg/Kg	J	A
PHOSPHORUS	80.6		0.597	MDL	10.7	PQL	mg/Kg	J	Q, E
TIN	2.56	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.74	J	0.896	MDL	5.33	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE027 Laboratory: LL

EDD Filename: PrepDE027_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-040-SA5C-SB-4.0-5.0 *Collected:* 12/2/2010 12:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	1840		6.91	MDL	22.6	PQL	mg/Kg	J	A
PHOSPHORUS	80.6		0.631	MDL	11.3	PQL	mg/Kg	J	Q, E
SODIUM	105	J	42.1	MDL	113	PQL	mg/Kg	J	Z
TIN	2.62	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.00	J	0.947	MDL	5.64	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5C-SB-9.0-10.0 *Collected:* 12/2/2010 12:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2150		6.92	MDL	22.6	PQL	mg/Kg	J	A
PHOSPHORUS	129		0.633	MDL	11.3	PQL	mg/Kg	J	Q, E
TIN	2.84	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	5.00	J	0.949	MDL	5.65	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP10-SA5C-QC-120210 *Collected:* 12/2/2010 9:42:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.155		0.0452	MDL	0.126	PQL	mg/Kg	J	Q, FD

Sample ID: DUP10-SA5C-QC-120210 *Collected:* 12/2/2010 9:42:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.116	J	0.0502	MDL	0.502	PQL	mg/Kg	J	Z

Sample ID: DUP10-SA5C-QC-120210 *Collected:* 12/2/2010 9:42:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	214		0.136	MDL	0.502	PQL	mg/Kg	J	E, FD, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE027 **Laboratory:** LL

EDD Filename: PrepDE027_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP10-SA5C-QC-120210 **Collected:** 12/2/2010 9:42:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.240	J	0.0753	MDL	0.251	PQL	mg/Kg	J	Z, Q
ARSENIC	14.6		0.0753	MDL	0.502	PQL	mg/Kg	J	E, A
BERYLLIUM	1.59		0.0201	MDL	0.126	PQL	mg/Kg	J	FD
CHROMIUM	49.3		0.151	MDL	0.502	PQL	mg/Kg	J	Q, E, FD
COBALT	16.9		0.0251	MDL	0.126	PQL	mg/Kg	J	FD
COPPER	25.9		0.0829	MDL	0.502	PQL	mg/Kg	J	Q, E, FD
LEAD	16.7		0.0131	MDL	0.251	PQL	mg/Kg	J	E, FD, A
NICKEL	34.9		0.126	MDL	0.502	PQL	mg/Kg	J	FD
SILVER	0.0523	J	0.0151	MDL	0.126	PQL	mg/Kg	J	Z, Q, FD
THALLIUM	0.701		0.0377	MDL	0.126	PQL	mg/Kg	J	FD
VANADIUM	76.7		0.0276	MDL	0.126	PQL	mg/Kg	J	Q, E, FD
ZINC	145		0.703	MDL	3.77	PQL	mg/Kg	J	E

Sample ID: SL-036-SA5C-SB-4.0-5.0 **Collected:** 12/2/2010 4:10:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0460	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5C-SB-4.0-5.0 **Collected:** 12/2/2010 4:10:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.283		0.0558	MDL	0.112	PQL	mg/Kg	U	B

Sample ID: SL-036-SA5C-SB-4.0-5.0 **Collected:** 12/2/2010 4:10:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	98.6		0.121	MDL	0.446	PQL	mg/Kg	J	E, A

Sample ID: SL-036-SA5C-SB-4.0-5.0 **Collected:** 12/2/2010 4:10:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0937	J	0.0670	MDL	0.223	PQL	mg/Kg	J	Z, Q
ARSENIC	6.24		0.0670	MDL	0.446	PQL	mg/Kg	J	E, A
CHROMIUM	21.7		0.134	MDL	0.446	PQL	mg/Kg	J	Q, E
COPPER	7.08		0.0737	MDL	0.446	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE027 **Laboratory:** LL

EDD Filename: PrepDE027_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-036-SA5C-SB-4.0-5.0 ***Collected:*** 12/2/2010 4:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	7.06		0.0116	MDL	0.223	PQL	mg/Kg	J	E, A
VANADIUM	42.4		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, E
ZINC	52.2		0.625	MDL	3.35	PQL	mg/Kg	J	E

Sample ID: SL-037-SA5C-SB-3.5-4.5 ***Collected:*** 12/2/2010 9:47:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0937	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5C-SB-3.5-4.5 ***Collected:*** 12/2/2010 9:47:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.231		0.0560	MDL	0.112	PQL	mg/Kg	U	B

Sample ID: SL-037-SA5C-SB-3.5-4.5 ***Collected:*** 12/2/2010 9:47:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	122		0.121	MDL	0.448	PQL	mg/Kg	J	E, FD, A

Sample ID: SL-037-SA5C-SB-3.5-4.5 ***Collected:*** 12/2/2010 9:47:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.220	J	0.0672	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	14.4		0.0672	MDL	0.448	PQL	mg/Kg	J	E, A
BERYLLIUM	0.525		0.0179	MDL	0.112	PQL	mg/Kg	J	FD
CADMIUM	0.0845	J	0.0403	MDL	0.112	PQL	mg/Kg	J	Z, Q, FD
CHROMIUM	22.2		0.134	MDL	0.448	PQL	mg/Kg	J	Q, E, FD
COBALT	6.50		0.0224	MDL	0.112	PQL	mg/Kg	J	FD
COPPER	11.4		0.0739	MDL	0.448	PQL	mg/Kg	J	Q, E, FD
LEAD	6.17		0.0116	MDL	0.224	PQL	mg/Kg	J	E, FD, A
NICKEL	15.6		0.112	MDL	0.448	PQL	mg/Kg	J	FD
SILVER	0.0134	U	0.0134	MDL	0.112	PQL	mg/Kg	UJ	FD
THALLIUM	0.417		0.0336	MDL	0.112	PQL	mg/Kg	J	FD
VANADIUM	43.6		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, E, FD
ZINC	93.0		0.627	MDL	3.36	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE027 Laboratory: LL

EDD Filename: PrepDE027_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-039-SA5C-SB-4.0-5.0 **Collected:** 12/2/2010 2:49:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0642	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5C-SB-4.0-5.0 **Collected:** 12/2/2010 2:49:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.301		0.0518	MDL	0.104	PQL	mg/Kg	U	B

Sample ID: SL-039-SA5C-SB-4.0-5.0 **Collected:** 12/2/2010 2:49:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	90.5		0.112	MDL	0.414	PQL	mg/Kg	J	E, A

Sample ID: SL-039-SA5C-SB-4.0-5.0 **Collected:** 12/2/2010 2:49:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0992	J	0.0622	MDL	0.207	PQL	mg/Kg	J	Z, Q
ARSENIC	5.81		0.0622	MDL	0.414	PQL	mg/Kg	J	E, A
CADMIUM	0.0489	J	0.0373	MDL	0.104	PQL	mg/Kg	J	Z, Q
CHROMIUM	19.8		0.124	MDL	0.414	PQL	mg/Kg	J	Q, E
COPPER	7.73		0.0684	MDL	0.414	PQL	mg/Kg	J	Q, E
LEAD	5.27		0.0108	MDL	0.207	PQL	mg/Kg	J	E, A
SILVER	0.0228	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z, Q
VANADIUM	37.4		0.0228	MDL	0.104	PQL	mg/Kg	J	Q, E
ZINC	49.1		0.580	MDL	3.11	PQL	mg/Kg	J	E

Sample ID: SL-040-SA5C-SB-4.0-5.0 **Collected:** 12/2/2010 12:19:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0630	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5C-SB-4.0-5.0 **Collected:** 12/2/2010 12:19:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.355		0.0553	MDL	0.111	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE027 **Laboratory:** LL

EDD Filename: PrepDE027_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-040-SA5C-SB-4.0-5.0 *Collected:* 12/2/2010 12:19:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	129		0.119	MDL	0.442	PQL	mg/Kg	J	E, A

Sample ID: SL-040-SA5C-SB-4.0-5.0 *Collected:* 12/2/2010 12:19:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0910	J	0.0663	MDL	0.221	PQL	mg/Kg	J	Z, Q
ARSENIC	6.32		0.0663	MDL	0.442	PQL	mg/Kg	J	E, A
CADMIUM	0.116		0.0398	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	23.2		0.133	MDL	0.442	PQL	mg/Kg	J	Q, E
COPPER	7.13		0.0730	MDL	0.442	PQL	mg/Kg	J	Q, E
LEAD	6.49		0.0115	MDL	0.221	PQL	mg/Kg	J	E, A
SILVER	0.0487	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
VANADIUM	45.5		0.0243	MDL	0.111	PQL	mg/Kg	J	Q, E
ZINC	48.7		0.619	MDL	3.32	PQL	mg/Kg	J	E

Sample ID: SL-040-SA5C-SB-9.0-10.0 *Collected:* 12/2/2010 12:26:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	96.2		0.122	MDL	0.452	PQL	mg/Kg	J	E, A

Sample ID: SL-040-SA5C-SB-9.0-10.0 *Collected:* 12/2/2010 12:26:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.144	J	0.0678	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	7.58		0.0678	MDL	0.452	PQL	mg/Kg	J	E, A
CHROMIUM	22.4		0.136	MDL	0.452	PQL	mg/Kg	J	Q, E
COPPER	8.56		0.0745	MDL	0.452	PQL	mg/Kg	J	Q, E
LEAD	6.11		0.0117	MDL	0.226	PQL	mg/Kg	J	E, A
SILVER	0.0520	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
VANADIUM	43.6		0.0248	MDL	0.113	PQL	mg/Kg	J	Q, E
ZINC	44.9		0.633	MDL	3.39	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE027 Laboratory: LL

EDD Filename: PrepDE027_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 Matrix: SO

Sample ID: SL-039-SA5C-SB-4.0-5.0 *Collected:* 12/2/2010 2:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.51	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5C-SB-9.0-10.0 *Collected:* 12/2/2010 12:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.52	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A Matrix: SO

Sample ID: DUP10-SA5C-QC-120210 *Collected:* 12/2/2010 9:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0203	J	0.0034	MDL	0.120	PQL	mg/Kg	J	Z, FD

Sample ID: SL-037-SA5C-SB-3.5-4.5 *Collected:* 12/2/2010 9:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0032	U	0.0032	MDL	0.113	PQL	mg/Kg	UJ	FD

Sample ID: SL-040-SA5C-SB-9.0-10.0 *Collected:* 12/2/2010 12:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0057	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C Matrix: SO

Sample ID: DUP10-SA5C-QC-120210 *Collected:* 12/2/2010 9:42:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	304		21.3	MDL	42.7	PQL	ng/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE027 **Laboratory:** LL

EDD Filename: PrepDE027_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-037-SA5C-SB-3.5-4.5 *Collected:* 12/2/2010 9:47:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	150		19.0	MDL	38.1	PQL	ng/Kg	J	FD

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: DUP10-SA5C-QC-120210 *Collected:* 12/2/2010 9:42:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.1	J	0.51	MDL	1.5	PQL	mg/Kg	J	Z, FD
EFH (C30-C40)	6.5		0.51	MDL	1.5	PQL	mg/Kg	J	FD

Sample ID: SL-037-SA5C-SB-3.5-4.5 *Collected:* 12/2/2010 9:47:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.46	U	0.46	MDL	1.4	PQL	mg/Kg	UJ	FD
EFH (C30-C40)	1.6		0.46	MDL	1.4	PQL	mg/Kg	J	FD

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP10-SA5C-QC-120210 *Collected:* 12/2/2010 9:42:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.84	J	0.30	MDL	4.9	PQL	ug/Kg	U	B

Sample ID: SL-036-SA5C-SB-4.0-5.0 *Collected:* 12/2/2010 4:10:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.74	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-037-SA5C-SB-3.5-4.5 *Collected:* 12/2/2010 9:47:00 *Analysis Type:* RES *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.53	J	0.28	MDL	4.6	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE027 Laboratory: LL

EDD Filename: PrepDE027_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-039-SA5C-SB-4.0-5.0 **Collected:** 12/2/2010 2:49:00 **Analysis Type:** RES **Dilution:** 1.02

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.57	J	0.27	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-040-SA5C-SB-4.0-5.0 **Collected:** 12/2/2010 12:19:00 **Analysis Type:** RES **Dilution:** 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7.5	J	7.0	MDL	8.3	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.74	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE027 **Laboratory: LL**

EDD Filename: PrepDE027_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE027 **Laboratory: LL**

EDD Filename: PrepDE027_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE027 **Laboratory: LL**

EDD Filename: PrepDE027_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE027

Method Blank Outlier Report

Lab Reporting Batch ID: DE027 **Laboratory: LL**

EDD Filename: DE027_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34008DB221236	12/8/2010 12:36:00 PM	ALUMINUM CALCIUM IRON PHOSPHORUS TIN	6.51 mg/Kg 66.1 mg/Kg 5.56 mg/Kg 0.811 mg/Kg 1.29 mg/Kg	DUP10-SA5C-QC-120210 SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA5C-QC-120210(RES)	TIN	4.25 mg/Kg	4.25U mg/Kg
SL-036-SA5C-SB-4.0-5.0(RES)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-037-SA5C-SB-3.5-4.5(RES)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-039-SA5C-SB-4.0-5.0(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-040-SA5C-SB-4.0-5.0(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-040-SA5C-SB-9.0-10.0(RES)	TIN	2.84 mg/Kg	2.84U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34026CB220943A	12/9/2010 9:43:00 AM	VANADIUM	0.0357 mg/Kg	DUP10-SA5C-QC-120210 SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-9.0-10.0
P34026CB220943C	12/9/2010 9:43:00 AM	MOLYBDENUM	0.0723 mg/Kg	DUP10-SA5C-QC-120210 SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-036-SA5C-SB-4.0-5.0(REA3)	MOLYBDENUM	0.283 mg/Kg	0.283U mg/Kg
SL-037-SA5C-SB-3.5-4.5(REA3)	MOLYBDENUM	0.231 mg/Kg	0.231U mg/Kg
SL-039-SA5C-SB-4.0-5.0(REA3)	MOLYBDENUM	0.301 mg/Kg	0.301U mg/Kg
SL-040-SA5C-SB-4.0-5.0(REA3)	MOLYBDENUM	0.355 mg/Kg	0.355U mg/Kg

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB07B211623A	12/6/2010 4:23:00 PM	METHYLENE CHLORIDE	0.40 ug/Kg	DUP10-SA5C-QC-120210 SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE027 **Laboratory: LL**

EDD Filename: DE027_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA5C-QC-120210(RES)	METHYLENE CHLORIDE	0.84 ug/Kg	4.9U ug/Kg
SL-036-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.74 ug/Kg	4.1U ug/Kg
SL-037-SA5C-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	0.53 ug/Kg	4.6U ug/Kg
SL-039-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.57 ug/Kg	4.4U ug/Kg
SL-040-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.74 ug/Kg	4.2U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE027 Laboratory: LL

EDD Filename: DE027_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5C-SB-3.5-4.5MSD (SL-037-SA5C-SB-3.5-4.5)	DIETHYLENE GLYCOL	-	-	59.00-109.00	37 (20.00)	DIETHYLENE GLYCOL	J (all detects)
SL-037-SA5C-SB-3.5-4.5MSD (SL-037-SA5C-SB-3.5-4.5)	EFH (C8-C11)	-	-	49.00-123.00	21 (20.00)	EFH (C8-C11)	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5C-SB-3.5-4.5MS SL-037-SA5C-SB-3.5-4.5MSD (DUP10-SA5C-QC-120210 SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-9.0-10.0)	CADMIUM SILVER	128 -	- 129	75.00-125.00 75.00-125.00	- -	CADMIUM SILVER	J(all detects)
SL-037-SA5C-SB-3.5-4.5MS SL-037-SA5C-SB-3.5-4.5MSD (DUP10-SA5C-QC-120210 SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-9.0-10.0)	ARSENIC ZINC	-138 -84	-26 -56	75.00-125.00 75.00-125.00	- -	ARSENIC ZINC	No Qual, >4x
SL-037-SA5C-SB-3.5-4.5MS SL-037-SA5C-SB-3.5-4.5MSD (DUP10-SA5C-QC-120210 SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-9.0-10.0)	ANTIMONY CHROMIUM COPPER VANADIUM	51 67 74 38	53 - - 55	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ANTIMONY CHROMIUM COPPER VANADIUM	J(all detects) UJ(all non-detects)
SL-037-SA5C-SB-3.5-4.5MS SL-037-SA5C-SB-3.5-4.5MSD (DUP10-SA5C-QC-120210 SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-9.0-10.0)	BARIUM	-175	-58	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5C-SB-3.5-4.5MS SL-037-SA5C-SB-3.5-4.5MSD (DUP10-SA5C-QC-120210 SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-9.0-10.0)	ALUMINUM CALCIUM MAGNESIUM TITANIUM	764 177 167 317	792 - - 294	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ALUMINUM CALCIUM MAGNESIUM TITANIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE027 **Laboratory: LL**

EDD Filename: DE027_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5C-SB-3.5-4.5MS SL-037-SA5C-SB-3.5-4.5MSD (DUP10-SA5C-QC-120210 SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-9.0-10.0)	IRON PHOSPHORUS	61 -	457 2270	75.00-125.00 75.00-125.00	- 138 (20.00)	IRON PHOSPHORUS	J(all detects) UJ(all non-detects) Fe No Qual, >4x

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5C-SB-3.5-4.5MS SL-037-SA5C-SB-3.5-4.5MSD (SL-037-SA5C-SB-3.5-4.5)	Chlorotrifluoroethylene	154	155	70.00-130.00	-	Chlorotrifluoroethylene	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE027 Laboratory: LL

EDD Filename: DE027_v1 eQAPP Name: CDM_SSFL_110509

Method: 160.3M
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-037-SA5C-SB-3.5-4.5DUP (DUP10-SA5C-QC-120210 SL-039-SA5C-SB-4.0-5.0)	MOISTURE	32		No Qual % Moisture not validated

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-037-SA5C-SB-3.5-4.5DUP (SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0)	Nitrate-NO3	58	20.00	No Qual Ok by difference

Method: 314.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-037-SA5C-SB-3.5-4.5DUP (SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0)	PERCHLORATE	200	20.00	No Qual, Ok by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-037-SA5C-SB-3.5-4.5DUP (DUP10-SA5C-QC-120210 SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-9.0-10.0)	Zirconium	26	20.00	No Qual, Ok by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-037-SA5C-SB-3.5-4.5DUP (DUP10-SA5C-QC-120210 SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-9.0-10.0)	ANTIMONY	67	20.00	
	ARSENIC	48	20.00	
	BARIUM	37	20.00	
	BERYLLIUM	21	20.00	
	CHROMIUM	24	20.00	
	COPPER	27	20.00	J(all detects)
	LEAD	30	20.00	UJ(all non-detects)
	MOLYBDENUM	28	20.00	
	SELENIUM	36	20.00	Sb, Be, Mo, Se, Tl, Zr
	THALLIUM	44	20.00	No Qual,
	VANADIUM	22	20.00	Ok by difference
	ZINC	28	20.00	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE027 **Laboratory: LL**

EDD Filename: DE027_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-037-SA5C-SB-3.5-4.5DUP (DUP10-SA5C-QC-120210 SL -036-SA5C-SB-4.0-5.0 SL -037-SA5C-SB-3.5-4.5 SL -039-SA5C-SB-4.0-5.0 SL -040-SA5C-SB-4.0-5.0 SL -040-SA5C-SB-9.0-10.0)	HEXAVALENT CHROMIUM	200	20.00	No Qual, Ok by difference

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-040-SA5C-SB-4.0-5.0DUP (DUP10-SA5C-QC-120210 SL -040-SA5C-SB-4.0-5.0 SL -040-SA5C-SB-9.0-10.0)	FLUORIDE	200	20.00	No Qual, Ok by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE027 Laboratory: LL

EDD Filename: DE027_v1 eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY29Y211328A (TB-120210)	1,2-DIBROMO-3-CHLOROPROP	-	126	66.00-120.00	-	1,2-DIBROMO-3-CHLOROPRO	J(all detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B07Q211711A (DUP10-SA5C-QC-120210 SL-036-SA5C-SB-4.0-5.0 SL-037-SA5C-SB-3.5-4.5 SL-039-SA5C-SB-4.0-5.0 SL-040-SA5C-SB-4.0-5.0)	Chlorotrifluoroethylene	141	-	22.00-131.00	-	Chlorotrifluoroethylene	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE027 **Laboratory: LL**

EDD Filename: PrepDE027_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-037-SA5C-SB-3.5-4.5	DUP10-SA5C-QC-120210			
MOISTURE	12.4	21.9	55		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-037-SA5C-SB-3.5-4.5	DUP10-SA5C-QC-120210			
N-NITROSODIMETHYLAMINE	150	304	68	50.00	J(all detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-037-SA5C-SB-3.5-4.5	DUP10-SA5C-QC-120210			
FLUORIDE	5.1	5.5	8	50.00	No Qualifiers Applied
Nitrate-NO3	2.6	2.2	17	50.00	

Method: 314.0
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-037-SA5C-SB-3.5-4.5	DUP10-SA5C-QC-120210			
PERCHLORATE	11.3	38.4 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-037-SA5C-SB-3.5-4.5	DUP10-SA5C-QC-120210			
BORON	11.5	15.5	30	50.00	No Qualifiers Applied
MANGANESE	270	382	34	50.00	
PHOSPHORUS	422	552	27	50.00	
POTASSIUM	2000	2520	23	50.00	
TIN	2.88	4.25	38	50.00	
TITANIUM	1480	1890	24	50.00	
ALUMINUM	10400	33000	104	50.00	J(all detects)
CALCIUM	3030	8060	91	50.00	
IRON	19200	46300	83	50.00	
LITHIUM	27.3	65.9	83	50.00	
MAGNESIUM	4050	8570	72	50.00	
SODIUM	102	464	128	50.00	
STRONTIUM	13.4	38.6	97	50.00	
Zirconium	3.81	7.64	67	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE027 **Laboratory: LL**

EDD Filename: PrepDE027_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-037-SA5C-SB-3.5-4.5	DUP10-SA5C-QC-120210			
ANTIMONY	0.220	0.240	9	50.00	No Qualifiers Applied
ARSENIC	14.4	14.6	1	50.00	
MOLYBDENUM	0.231	0.385	50	50.00	
SELENIUM	0.0937	0.116	21	50.00	
ZINC	93.0	145	44	50.00	
BARIUM	122	214	55	50.00	J(all detects) UJ(all non-detects)
BERYLLIUM	0.525	1.59	101	50.00	
CADMIUM	0.0845	0.155	59	50.00	
CHROMIUM	22.2	49.3	76	50.00	
COBALT	6.50	16.9	89	50.00	
COPPER	11.4	25.9	78	50.00	
LEAD	6.17	16.7	92	50.00	
NICKEL	15.6	34.9	76	50.00	
SILVER	0.112 U	0.0523	200	50.00	
THALLIUM	0.417	0.701	51	50.00	
VANADIUM	43.6	76.7	55	50.00	

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-037-SA5C-SB-3.5-4.5	DUP10-SA5C-QC-120210			
MERCURY	0.113 U	0.0203	200	50.00	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-037-SA5C-SB-3.5-4.5	DUP10-SA5C-QC-120210			
EFH (C21-C30)	1.4 U	1.1	200	50.00	J(all detects) UJ(all non-detects)
EFH (C30-C40)	1.6	6.5	121	50.00	

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-037-SA5C-SB-3.5-4.5	DUP10-SA5C-QC-120210			
METHYLENE CHLORIDE	0.53	0.84	45	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-037-SA5C-SB-3.5-4.5	DUP10-SA5C-QC-120210			
PH	7.02	7.99	13	50.00	No Qualifiers Applied

Field Duplicate RPD Report

Lab Reporting Batch ID: DE027 **Laboratory: LL**

EDD Filename: PrepDE027_v1 **eQAPP Name: CDM_SSFL_110509**

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-037-SA5C-SB-3.5-4.5	DUP10-SA5C-QC-120210			
Oxidation Reduction Potential	465	459	1		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE027 Laboratory: LL

EDD Filename: DE027_v1 eQAPP Name: CDM_SSFL_110509

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-039-SA5C-SB-4.0-5.0	Nitrate-NO3	J	1.4	1.6	PQL	mg/Kg	J (all detects)

Method: 314.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5C-SB-4.0-5.0	PERCHLORATE	J	21.9	34.5	PQL	ug/Kg	J (all detects)
SL-037-SA5C-SB-3.5-4.5	PERCHLORATE	J	11.3	34.2	PQL	ug/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA5C-QC-120210	TIN	J	4.25	12.4	PQL	mg/Kg	J (all detects)
SL-036-SA5C-SB-4.0-5.0	TIN	J	2.82	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.34	5.58	PQL	mg/Kg	
SL-037-SA5C-SB-3.5-4.5	SODIUM	J	102	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.88	11.1	PQL	mg/Kg	
	Zirconium	J	3.81	5.54	PQL	mg/Kg	
SL-039-SA5C-SB-4.0-5.0	TIN	J	2.56	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.74	5.33	PQL	mg/Kg	
SL-040-SA5C-SB-4.0-5.0	SODIUM	J	105	113	PQL	mg/Kg	J (all detects)
	TIN	J	2.62	11.3	PQL	mg/Kg	
	Zirconium	J	3.00	5.64	PQL	mg/Kg	
SL-040-SA5C-SB-9.0-10.0	TIN	J	2.84	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.00	5.65	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA5C-QC-120210	ANTIMONY	J	0.240	0.251	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.116	0.502	PQL	mg/Kg	
	SILVER	J	0.0523	0.126	PQL	mg/Kg	
SL-036-SA5C-SB-4.0-5.0	ANTIMONY	J	0.0937	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0460	0.446	PQL	mg/Kg	
SL-037-SA5C-SB-3.5-4.5	ANTIMONY	J	0.220	0.224	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0845	0.112	PQL	mg/Kg	
	SELENIUM	J	0.0937	0.448	PQL	mg/Kg	
SL-039-SA5C-SB-4.0-5.0	ANTIMONY	J	0.0992	0.207	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0489	0.104	PQL	mg/Kg	
	SELENIUM	J	0.0642	0.414	PQL	mg/Kg	
	SILVER	J	0.0228	0.104	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE027 **Laboratory: LL**

EDD Filename: DE027_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-040-SA5C-SB-4.0-5.0	ANTIMONY	J	0.0910	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0630	0.442	PQL	mg/Kg	
	SILVER	J	0.0487	0.111	PQL	mg/Kg	
SL-040-SA5C-SB-9.0-10.0	ANTIMONY	J	0.144	0.226	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0520	0.113	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-039-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.51	1.1	PQL	mg/Kg	J (all detects)
SL-040-SA5C-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.52	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA5C-QC-120210	MERCURY	J	0.0203	0.120	PQL	mg/Kg	J (all detects)
SL-040-SA5C-SB-9.0-10.0	MERCURY	J	0.0057	0.114	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA5C-QC-120210	EFH (C21-C30)	J	1.1	1.5	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA5C-QC-120210	METHYLENE CHLORIDE	J	0.84	4.9	PQL	ug/Kg	J (all detects)
SL-036-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.74	4.1	PQL	ug/Kg	J (all detects)
SL-037-SA5C-SB-3.5-4.5	METHYLENE CHLORIDE	J	0.53	4.6	PQL	ug/Kg	J (all detects)
SL-039-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.57	4.4	PQL	ug/Kg	J (all detects)
SL-040-SA5C-SB-4.0-5.0	ACETONE	J	7.5	8.3	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.74	4.2	PQL	ug/Kg	

LDC #: 25337A4 **VALIDATION COMPLETENESS WORKSHEET** Date: 5-4-11
SDG #: DE027 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CR
2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	ICB/CCB hits — NO Qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, As, Ba, Ca, Fe, Mg, Mn, Ti, Zn 74X)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Be, Mo, Se, Zr, Tl <5xRL)
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A (As Ba Ca Pb)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-037-SA5C-SB-3.5-4.5	11		21		31	
2	SL-039-SA5C-SB-4.0-5.0	12		22		32	
3	SL-036-SA5C-SB-4.0-5.0	13		23		33	
4	DUP10-SA5C-QC-120210	14		24		34	
5	SL-040-SA5C-SB-4.0-5.0	15		25		35	
6	SL-040-SA5C-SB-9.0-10.0	16		26		36	
7	SL-037-SA5C-SB-3.5-4.5MS	17		27		37	
8	SL-037-SA5C-SB-3.5-4.5MSD	18		28		38	
9	SL-037-SA5C-SB-3.5-4.5DUP	19		29		39	
10		20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE027
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6154843BKG Serial Dilution Lab Sample ID: 6154843L
Batch ID(s): P34008D, P34026C
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		93573.2200		90672.9500		3		P
Antimony	121	0.9813	B	1.5000	U	100		MS
Arsenic	75	64.1800		55.8000		13	E	MS
Barium	137	543.8000		482.8000		11	E	MS
Beryllium	9	2.3470		2.3630	B	1		MS
Boron		104.1700		142.1000	B	36		P
Cadmium	111	0.3777	B	0.9000	U	100		MS
Calcium		27372.8100		31145.4000		14	E	P
Chromium	52	99.3400		102.2500		3		MS
Cobalt	59	29.0600		27.8150		4		MS
Copper	63	51.1400		50.8000		1		MS
Iron		173337.3000		173215.0500		0		P
Lead	208	27.5700		24.2000		12	E	MS
Lithium		246.2500		262.4500		7		P
Magnesium		36566.4600		38195.6500		4		P
Manganese		2432.2800		2547.9000		5		P
Molybdenum	98	1.0310		1.4775	B	43		MS
Nickel	60	69.6000		73.3000		5		MS
Phosphorus		3807.8600		3798.1500		0		P
Potassium		18086.3700		18416.4000		2		P
Selenium	78	0.4186	B	1.0000	U	100		MS
Silver	107	0.0600	U	0.3000	U			MS
Sodium		916.9800	B	1865.0000	U	100		P
Strontium		120.5300		122.5000		2		P
Thallium	203	1.8630		1.7210	B	8		MS
Tin		26.0000	B	50.0000	U	100		P
Titanium		2675.1100		2643.7500		1		P
Vanadium	51	194.9000		191.2500		2		MS
Zinc	66	415.7000		374.8000		10		MS
Zirconium		34.3500	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	3050B	6010B	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	3050B	6020	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	3060A	7199	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	3546	1625C	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	3550B	8015B	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	3550B	8015M	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	3550B	8082	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	3550B	8270C	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	3550B	8270C SIM	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	5035	8015M	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	5035	8260B	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	5035	8260B SIM	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	8330	8330A	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	Gen Prep	9045M	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	METHOD	300.0	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	METHOD	314.0	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	METHOD	7471A	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	METHOD	8015B	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	METHOD	8015M	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	METHOD	8315A	III
03-Dec-2010	SL-030-SA5C-SB-4.0-5.0	6156143	N	METHOD	9012B	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	3050B	6010B	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	3050B	6020	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	3060A	7199	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	3546	1625C	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	3550B	8015M	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	3550B	8082	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	3550B	8270C	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	3550B	8270C SIM	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	5035	8015M	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	5035	8260B	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	5035	8260B SIM	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	8330	8330A	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	Gen Prep	9045M	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	METHOD	300.0	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	METHOD	314.0	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	METHOD	7471A	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	METHOD	8015B	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	METHOD	8015M	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	METHOD	8315A	III
03-Dec-2010	SL-030-SA5C-SB-9.0-10.0	6156142	N	METHOD	9012B	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	3050B	6010B	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	3050B	6020	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	3060A	7199	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	3546	1625C	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	3550B	8015B	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	3550B	8015M	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	3550B	8082	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	3550B	8270C	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	3550B	8270C SIM	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	5035	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	5035	8260B	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	5035	8260B SIM	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	8330	8330A	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	Gen Prep	9045M	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	METHOD	300.0	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	METHOD	314.0	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	METHOD	7471A	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	METHOD	8015B	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	METHOD	8015M	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	METHOD	8315A	III
03-Dec-2010	SL-031-SA5C-SB-4.0-5.0	6156145	N	METHOD	9012B	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	3050B	6010B	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	3050B	6020	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	3060A	7199	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	3546	1625C	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	3550B	8015B	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	3550B	8015M	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	3550B	8082	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	3550B	8270C	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	3550B	8270C SIM	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	5035	8015M	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	5035	8260B	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	5035	8260B SIM	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	8330	8330A	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	Gen Prep	9045M	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	METHOD	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	METHOD	314.0	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	METHOD	6850	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	METHOD	7471A	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	METHOD	8015B	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	METHOD	8015M	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	METHOD	8315A	III
03-Dec-2010	SL-031-SA5C-SB-9.0-10.0	6156144	N	METHOD	9012B	III
03-Dec-2010	TB-120310	6156151	TB	5030B	8015M	III
03-Dec-2010	TB-120310	6156151	TB	5030B	8260B	III
03-Dec-2010	TB-120310	6156151	TB	5030B	8260B SIM	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	3050B	6010B	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	3050B	6020	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	3060A	7199	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	3546	1625C	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	3550B	8015B	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	3550B	8015M	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	3550B	8082	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	3550B	8270C	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	3550B	8270C SIM	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	5035	8015M	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	5035	8260B	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	5035	8260B SIM	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	8330	8330A	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	Gen Prep	9045M	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	METHOD	300.0	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	METHOD	7471A	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	METHOD	8015B	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	METHOD	8015M	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	METHOD	8315A	III
03-Dec-2010	DUP11-SA5C-QC-120310	6156150	FD	METHOD	9012B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	3050B	6010B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	3050B	6020	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	3060A	7199	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	3546	1625C	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	3550B	8015B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	3550B	8015M	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	3550B	8082	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	3550B	8270C	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	3550B	8270C SIM	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	5035	8015M	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	5035	8260B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	5035	8260B SIM	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	8330	8330A	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	Gen Prep	9045M	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	METHOD	300.0	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	METHOD	314.0	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	METHOD	7471A	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	METHOD	8015B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	METHOD	8015M	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	METHOD	8315A	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0	6156146	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	3050B	6010B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	3050B	6020	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	3060A	7199	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	3546	1625C	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	3550B	8015B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	3550B	8015M	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	3550B	8082	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	3550B	8270C	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	3550B	8270C SIM	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	5035	8015M	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	5035	8260B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	5035	8260B SIM	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	8330	8330A	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	METHOD	300.0	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	METHOD	314.0	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	METHOD	7471A	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	METHOD	8015B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	METHOD	8015M	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	METHOD	8315A	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	6156147	MS	METHOD	9012B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	3050B	6010B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	3050B	6020	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	3546	1625C	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	3550B	8015B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	3550B	8015M	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	3550B	8270C	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	3550B	8270C SIM	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	5035	8015M	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	5035	8260B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	5035	8260B SIM	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	8330	8330A	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	METHOD	7471A	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	METHOD	8015B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	METHOD	8015M	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	6156148	MSD	METHOD	8315A	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0DUP	6156149	DUP	3050B	6010B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0DUP	6156149	DUP	3050B	6020	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0DUP	6156149	DUP	3060A	7199	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0DUP	6156149	DUP	Gen Prep	9045M	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0DUP	6156149	DUP	METHOD	300.0	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0DUP	6156149	DUP	METHOD	314.0	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0DUP	6156149	DUP	METHOD	7471A	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0DUP	6156149	DUP	METHOD	9012B	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MSD	P156146M212000B	MSD	5035	8260B SIM	III
03-Dec-2010	SL-032-SA5C-SB-4.0-5.0MS	P156146R211940B	MS	5035	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE028 Laboratory: LL

EDD Filename: PrepDE028_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP11-SA5C-QC-120310 *Collected:* 12/3/2010 2:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	10.5		0.87	MDL	1.1	PQL	mg/Kg	J	FD
Nitrate-NO3	4.3		0.87	MDL	1.6	PQL	mg/Kg	J	FD

Sample ID: SL-031-SA5C-SB-9.0-10.0 *Collected:* 12/3/2010 12:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.9		0.87	MDL	1.1	PQL	mg/Kg	J	Q, E, FD
Nitrate-NO3	1.7		0.87	MDL	1.6	PQL	mg/Kg	J	Q, FD

Method Category: GENCHEM

Method: 314.0 **Matrix:** SO

Sample ID: SL-031-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	16.3	J	10.1	MDL	33.8	PQL	ug/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP11-SA5C-QC-120310 *Collected:* 12/3/2010 2:53:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	7.82		0.939	MDL	5.28	PQL	mg/Kg	J	FD
TIN	2.63	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.22	J	0.886	MDL	5.28	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE028 **Laboratory:** LL

EDD Filename: PrepDE028_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP11-SA5C-QC-120310 **Collected:** 12/3/2010 2:53:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	23000		4.97	MDL	21.1	PQL	mg/Kg	J	A
POTASSIUM	2090		19.0	MDL	52.8	PQL	mg/Kg	J	Q

Sample ID: SL-030-SA5C-SB-4.0-5.0 **Collected:** 12/3/2010 10:36:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.18	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.64	J	0.906	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: SL-030-SA5C-SB-4.0-5.0 **Collected:** 12/3/2010 10:36:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	19400		5.08	MDL	21.6	PQL	mg/Kg	J	A
POTASSIUM	3810		19.4	MDL	53.9	PQL	mg/Kg	J	Q

Sample ID: SL-030-SA5C-SB-9.0-10.0 **Collected:** 12/3/2010 10:40:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.86	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	1.64	J	0.945	MDL	5.63	PQL	mg/Kg	J	Z

Sample ID: SL-030-SA5C-SB-9.0-10.0 **Collected:** 12/3/2010 10:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	21200		5.30	MDL	22.5	PQL	mg/Kg	J	A
POTASSIUM	1940		20.3	MDL	56.3	PQL	mg/Kg	J	Q

Sample ID: SL-031-SA5C-SB-4.0-5.0 **Collected:** 12/3/2010 12:40:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.85	J	0.983	MDL	5.52	PQL	mg/Kg	J	Z
TIN	2.97	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.51	J	0.927	MDL	5.52	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE028 Laboratory: LL

EDD Filename: PrepDE028_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-031-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	18600		5.20	MDL	22.1	PQL	mg/Kg	J	A
POTASSIUM	3690		19.9	MDL	55.2	PQL	mg/Kg	J	Q
SODIUM	92.4	J	41.2	MDL	110	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5C-SB-9.0-10.0 *Collected:* 12/3/2010 12:44:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.91	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	1.42	J	0.955	MDL	5.68	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5C-SB-9.0-10.0 *Collected:* 12/3/2010 12:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	29600		5.35	MDL	22.7	PQL	mg/Kg	J	A
POTASSIUM	1780		20.5	MDL	56.8	PQL	mg/Kg	J	Q

Sample ID: SL-032-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 3:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.928	U	0.928	MDL	5.21	PQL	mg/Kg	UJ	FD
TIN	3.20	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.30	J	0.876	MDL	5.21	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	24900		4.91	MDL	20.9	PQL	mg/Kg	J	A
POTASSIUM	1970		18.8	MDL	52.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE028 **Laboratory:** LL

EDD Filename: PrepDE028_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP11-SA5C-QC-120310 ***Collected:*** 12/3/2010 2:53:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.111	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z, Q

Sample ID: DUP11-SA5C-QC-120310 ***Collected:*** 12/3/2010 2:53:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.834		0.0533	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: DUP11-SA5C-QC-120310 ***Collected:*** 12/3/2010 2:53:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	125		0.115	MDL	0.426	PQL	mg/Kg	J	E

Sample ID: DUP11-SA5C-QC-120310 ***Collected:*** 12/3/2010 2:53:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0639	U	0.0639	MDL	0.213	PQL	mg/Kg	UJ	Q, FD
ARSENIC	8.20		0.0639	MDL	0.426	PQL	mg/Kg	J	Q, E, E
BERYLLIUM	0.853		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CADMIUM	0.0623	J	0.0384	MDL	0.107	PQL	mg/Kg	UJ	Q, B
CHROMIUM	25.7		0.128	MDL	0.426	PQL	mg/Kg	J	Q, E
COBALT	4.49		0.0213	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	9.56		0.0703	MDL	0.426	PQL	mg/Kg	J	Q, E, A
LEAD	8.17		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, E, E
NICKEL	11.3		0.107	MDL	0.426	PQL	mg/Kg	J	Q, E
SILVER	0.0279	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.396		0.0320	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	44.0		0.0234	MDL	0.107	PQL	mg/Kg	J	Q, E
ZINC	56.6		0.597	MDL	3.20	PQL	mg/Kg	J	E

Sample ID: SL-030-SA5C-SB-4.0-5.0 ***Collected:*** 12/3/2010 10:36:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.116		0.0392	MDL	0.109	PQL	mg/Kg	UJ	Q, B
THALLIUM	0.278		0.0327	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE028 **Laboratory:** LL

EDD Filename: PrepDE028_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-030-SA5C-SB-4.0-5.0 ***Collected:*** 12/3/2010 10:36:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.134	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z, Q

Sample ID: SL-030-SA5C-SB-4.0-5.0 ***Collected:*** 12/3/2010 10:36:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.779		0.0545	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-030-SA5C-SB-4.0-5.0 ***Collected:*** 12/3/2010 10:36:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	154		0.118	MDL	0.436	PQL	mg/Kg	J	E

Sample ID: SL-030-SA5C-SB-4.0-5.0 ***Collected:*** 12/3/2010 10:36:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0779	J	0.0654	MDL	0.218	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.87		0.0654	MDL	0.436	PQL	mg/Kg	J	Q, E, E
BERYLLIUM	0.682		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	22.8		0.131	MDL	0.436	PQL	mg/Kg	J	Q, E
COBALT	7.35		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	11.8		0.0719	MDL	0.436	PQL	mg/Kg	J	Q, E, A
LEAD	7.63		0.0113	MDL	0.218	PQL	mg/Kg	J	Q, E, E
NICKEL	14.5		0.109	MDL	0.436	PQL	mg/Kg	J	Q, E
SILVER	0.0411	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
VANADIUM	44.7		0.0240	MDL	0.109	PQL	mg/Kg	J	Q, E
ZINC	80.1		0.610	MDL	3.27	PQL	mg/Kg	J	E

Sample ID: SL-030-SA5C-SB-9.0-10.0 ***Collected:*** 12/3/2010 10:40:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0569	J	0.0455	MDL	0.455	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE028 Laboratory: LL

EDD Filename: PrepDE028_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-030-SA5C-SB-9.0-10.0 **Collected:** 12/3/2010 10:40:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.604		0.0568	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-030-SA5C-SB-9.0-10.0 **Collected:** 12/3/2010 10:40:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	133		0.123	MDL	0.455	PQL	mg/Kg	J	E

Sample ID: SL-030-SA5C-SB-9.0-10.0 **Collected:** 12/3/2010 10:40:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0682	U	0.0682	MDL	0.227	PQL	mg/Kg	UJ	Q
ARSENIC	7.70		0.0682	MDL	0.455	PQL	mg/Kg	J	Q, E, E
BERYLLIUM	0.905		0.0182	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.200		0.0409	MDL	0.114	PQL	mg/Kg	UJ	Q, B
CHROMIUM	23.3		0.136	MDL	0.455	PQL	mg/Kg	J	Q, E
COBALT	10.1		0.0227	MDL	0.114	PQL	mg/Kg	J	Q, E
COPPER	8.24		0.0750	MDL	0.455	PQL	mg/Kg	J	Q, E, A
LEAD	7.62		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, E, E
NICKEL	14.8		0.114	MDL	0.455	PQL	mg/Kg	J	Q, E
SILVER	0.0567	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z, Q
THALLIUM	0.281		0.0341	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	49.2		0.0250	MDL	0.114	PQL	mg/Kg	J	Q, E
ZINC	62.3		0.636	MDL	3.41	PQL	mg/Kg	J	E

Sample ID: SL-031-SA5C-SB-4.0-5.0 **Collected:** 12/3/2010 12:40:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.246		0.0328	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-031-SA5C-SB-4.0-5.0 **Collected:** 12/3/2010 12:40:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.135	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE028 **Laboratory:** LL

EDD Filename: PrepDE028_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-031-SA5C-SB-4.0-5.0 ***Collected:*** 12/3/2010 12:40:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.826		0.0547	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-031-SA5C-SB-4.0-5.0 ***Collected:*** 12/3/2010 12:40:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	163		0.118	MDL	0.437	PQL	mg/Kg	J	E

Sample ID: SL-031-SA5C-SB-4.0-5.0 ***Collected:*** 12/3/2010 12:40:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.126	J	0.0656	MDL	0.219	PQL	mg/Kg	UJ	Q, B
ARSENIC	4.97		0.0656	MDL	0.437	PQL	mg/Kg	J	Q, E, E
BERYLLIUM	0.646		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.238		0.0394	MDL	0.109	PQL	mg/Kg	UJ	Q, B
CHROMIUM	22.9		0.131	MDL	0.437	PQL	mg/Kg	J	Q, E
COBALT	7.26		0.0219	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	14.8		0.0722	MDL	0.437	PQL	mg/Kg	J	Q, E, A
LEAD	6.87		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, E, E
NICKEL	14.9		0.109	MDL	0.437	PQL	mg/Kg	J	Q, E
SILVER	0.0345	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
VANADIUM	44.4		0.0241	MDL	0.109	PQL	mg/Kg	J	Q, E
ZINC	81.0		0.612	MDL	3.28	PQL	mg/Kg	J	E

Sample ID: SL-031-SA5C-SB-9.0-10.0 ***Collected:*** 12/3/2010 12:44:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0670	J	0.0455	MDL	0.455	PQL	mg/Kg	J	Z, Q

Sample ID: SL-031-SA5C-SB-9.0-10.0 ***Collected:*** 12/3/2010 12:44:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.660		0.0568	MDL	0.114	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE028 **Laboratory:** LL

EDD Filename: PrepDE028_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-031-SA5C-SB-9.0-10.0 *Collected:* 12/3/2010 12:44:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	159		0.123	MDL	0.455	PQL	mg/Kg	J	E

Sample ID: SL-031-SA5C-SB-9.0-10.0 *Collected:* 12/3/2010 12:44:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.111	J	0.0682	MDL	0.227	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.87		0.0682	MDL	0.455	PQL	mg/Kg	J	Q, E, E
BERYLLIUM	0.971		0.0182	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.0938	J	0.0409	MDL	0.114	PQL	mg/Kg	UJ	Q, B
CHROMIUM	33.7		0.136	MDL	0.455	PQL	mg/Kg	J	Q, E
COBALT	6.44		0.0227	MDL	0.114	PQL	mg/Kg	J	Q, E
COPPER	11.6		0.0750	MDL	0.455	PQL	mg/Kg	J	Q, E, A
LEAD	7.81		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, E, E
NICKEL	16.1		0.114	MDL	0.455	PQL	mg/Kg	J	Q, E
SILVER	0.0775	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z, Q
THALLIUM	0.356		0.0341	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	51.6		0.0250	MDL	0.114	PQL	mg/Kg	J	Q, E
ZINC	70.0		0.637	MDL	3.41	PQL	mg/Kg	J	E

Sample ID: SL-032-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 3:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.177	J	0.0430	MDL	0.430	PQL	mg/Kg	J	Z, Q

Sample ID: SL-032-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 3:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.727		0.0537	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-032-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 3:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	132		0.116	MDL	0.430	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE028 Laboratory: LL

EDD Filename: PrepDE028_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-032-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 3:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.140	J	0.0644	MDL	0.215	PQL	mg/Kg	UJ	Q, B, FD
ARSENIC	6.97		0.0644	MDL	0.430	PQL	mg/Kg	J	Q, E, E
BERYLLIUM	0.961		0.0172	MDL	0.107	PQL	mg/Kg	J	Q
CADMIUM	0.0479	J	0.0387	MDL	0.107	PQL	mg/Kg	UJ	Q, B
CHROMIUM	23.9		0.129	MDL	0.430	PQL	mg/Kg	J	Q, E
COBALT	6.69		0.0215	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	8.82		0.0709	MDL	0.430	PQL	mg/Kg	J	Q, E, A
LEAD	7.15		0.0112	MDL	0.215	PQL	mg/Kg	J	Q, E, E
NICKEL	10.8		0.107	MDL	0.430	PQL	mg/Kg	J	Q, E
SILVER	0.0253	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.376		0.0322	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	41.0		0.0236	MDL	0.107	PQL	mg/Kg	J	Q, E
ZINC	47.7		0.601	MDL	3.22	PQL	mg/Kg	J	E

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP11-SA5C-QC-120310 *Collected:* 12/3/2010 2:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	2.3		0.22	MDL	1.1	PQL	mg/Kg	J	FD

Sample ID: SL-031-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 3:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.22	U	0.22	MDL	1.1	PQL	mg/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE028 Laboratory: LL

EDD Filename: PrepDE028_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-030-SA5C-SB-9.0-10.0 *Collected:* 12/3/2010 10:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0064	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5C-SB-9.0-10.0 *Collected:* 12/3/2010 12:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0096	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-030-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 10:36:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.46	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-031-SA5C-SB-9.0-10.0 *Collected:* 12/3/2010 12:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	19	MDL	380	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-030-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 10:36:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.83	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	0.87	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	0.82	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE028 Laboratory: LL

EDD Filename: PrepDE028_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-030-SA5C-SB-9.0-10.0 *Collected:* 12/3/2010 10:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.77	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.2	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-031-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 12:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.4	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.8	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.94	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	0.89	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.75	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-031-SA5C-SB-9.0-10.0 *Collected:* 12/3/2010 12:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.59	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix:** SO

Sample ID: SL-031-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	1200	J	680	MDL	1700	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8330A **Matrix:** SO

Sample ID: SL-031-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 12:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DINITROBENZENE	92	J	56	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE028 Laboratory: LL

EDD Filename: PrepDE028_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: DUP11-SA5C-QC-120310 **Collected:** 12/3/2010 2:53:00 **Analysis Type:** REA4 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	110	U	110	MDL	540	PQL	ug/Kg	UJ	FD

Sample ID: SL-032-SA5C-SB-4.0-5.0 **Collected:** 12/3/2010 3:00:00 **Analysis Type:** REA4 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	110	J	110	MDL	540	PQL	ug/Kg	J	Z, FD

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP11-SA5C-QC-120310 **Collected:** 12/3/2010 2:53:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.42	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-030-SA5C-SB-4.0-5.0 **Collected:** 12/3/2010 10:36:00 **Analysis Type:** RES **Dilution:** 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.60	J	0.23	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-030-SA5C-SB-9.0-10.0 **Collected:** 12/3/2010 10:40:00 **Analysis Type:** RES **Dilution:** 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.7	J	1.3	MDL	8.3	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.64	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-031-SA5C-SB-4.0-5.0 **Collected:** 12/3/2010 12:40:00 **Analysis Type:** RES **Dilution:** 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.50	J	0.26	MDL	4.3	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.09	MDL	4.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE028 Laboratory: LL

EDD Filename: PrepDE028_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-031-SA5C-SB-9.0-10.0 *Collected:* 12/3/2010 12:44:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.50	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-032-SA5C-SB-4.0-5.0 *Collected:* 12/3/2010 3:00:00 *Analysis Type:* RES *Dilution:* 1.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.68	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE028 **Laboratory: LL**

EDD Filename: PrepDE028_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE028 **Laboratory: LL**

EDD Filename: PrepDE028_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE028 **Laboratory: LL**

EDD Filename: PrepDE028_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE028

Method Blank Outlier Report

Lab Reporting Batch ID: DE028 Laboratory: LL

EDD Filename: DE028_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34108CB221043	12/10/2010 10:43:00 AM	TIN	1.83 mg/Kg	DUP11-SA5C-QC-120310 SL-030-SA5C-SB-4.0-5.0 SL-030-SA5C-SB-9.0-10.0 SL-031-SA5C-SB-4.0-5.0 SL-031-SA5C-SB-9.0-10.0 SL-032-SA5C-SB-4.0-5.0
P34108CB222229	12/8/2010 10:29:00 PM	PHOSPHORUS	1.63 mg/Kg	DUP11-SA5C-QC-120310 SL-030-SA5C-SB-4.0-5.0 SL-030-SA5C-SB-9.0-10.0 SL-031-SA5C-SB-4.0-5.0 SL-031-SA5C-SB-9.0-10.0 SL-032-SA5C-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP11-SA5C-QC-120310(REA)	TIN	2.63 mg/Kg	2.63U mg/Kg
SL-030-SA5C-SB-4.0-5.0(REA)	TIN	3.18 mg/Kg	3.18U mg/Kg
SL-030-SA5C-SB-9.0-10.0(REA)	TIN	2.86 mg/Kg	2.86U mg/Kg
SL-031-SA5C-SB-4.0-5.0(REA)	TIN	2.97 mg/Kg	2.97U mg/Kg
SL-031-SA5C-SB-9.0-10.0(REA)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-032-SA5C-SB-4.0-5.0(REA)	TIN	3.20 mg/Kg	3.20U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34126AB221146A	12/9/2010 11:46:00 AM	CADMIUM COPPER VANADIUM	0.0580 mg/Kg 0.167 mg/Kg 0.0362 mg/Kg	DUP11-SA5C-QC-120310 SL-030-SA5C-SB-4.0-5.0 SL-030-SA5C-SB-9.0-10.0 SL-031-SA5C-SB-4.0-5.0 SL-031-SA5C-SB-9.0-10.0 SL-032-SA5C-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP11-SA5C-QC-120310(RES)	CADMIUM	0.0623 mg/Kg	0.0623U mg/Kg
SL-030-SA5C-SB-4.0-5.0(REA)	CADMIUM	0.116 mg/Kg	0.116U mg/Kg
SL-030-SA5C-SB-9.0-10.0(RES)	CADMIUM	0.200 mg/Kg	0.200U mg/Kg
SL-031-SA5C-SB-4.0-5.0(RES)	CADMIUM	0.238 mg/Kg	0.238U mg/Kg
SL-031-SA5C-SB-9.0-10.0(RES)	CADMIUM	0.0938 mg/Kg	0.0938U mg/Kg
SL-032-SA5C-SB-4.0-5.0(RES)	CADMIUM	0.0479 mg/Kg	0.0479U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE028 **Laboratory: LL**

EDD Filename: DE028_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB09B210138A	12/8/2010 1:38:00 AM	METHYLENE CHLORIDE TOLUENE	0.81 ug/Kg 0.1 ug/Kg	DUP11-SA5C-QC-120310 SL-030-SA5C-SB-4.0-5.0 SL-030-SA5C-SB-9.0-10.0 SL-031-SA5C-SB-4.0-5.0 SL-031-SA5C-SB-9.0-10.0 SL-032-SA5C-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP11-SA5C-QC-120310(RES)	METHYLENE CHLORIDE	0.42 ug/Kg	4.3U ug/Kg
SL-030-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.60 ug/Kg	3.9U ug/Kg
SL-030-SA5C-SB-4.0-5.0(RES)	TOLUENE	0.08 ug/Kg	3.9U ug/Kg
SL-030-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.64 ug/Kg	4.1U ug/Kg
SL-030-SA5C-SB-9.0-10.0(RES)	TOLUENE	0.09 ug/Kg	4.1U ug/Kg
SL-031-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.50 ug/Kg	4.3U ug/Kg
SL-031-SA5C-SB-4.0-5.0(RES)	TOLUENE	0.11 ug/Kg	4.3U ug/Kg
SL-031-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.50 ug/Kg	3.9U ug/Kg
SL-032-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.68 ug/Kg	4.5U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE028 **Laboratory: LL**

EDD Filename: DE028_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-032-SA5C-SB-4.0-5.0MS	BERYLLIUM	-	153	75.00-125.00	-	BERYLLIUM	
SL-032-SA5C-SB-4.0-5.0MSD	CADMIUM	139	155	75.00-125.00	-	CADMIUM	
(DUP11-SA5C-QC-120310	CHROMIUM	157	196	75.00-125.00	-	CHROMIUM	
SL-030-SA5C-SB-4.0-5.0	COBALT	-	130	75.00-125.00	-	COBALT	
SL-030-SA5C-SB-9.0-10.0	COPPER	130	151	75.00-125.00	-	COPPER	J (all detects)
SL-031-SA5C-SB-4.0-5.0	NICKEL	138	161	75.00-125.00	-	NICKEL	
SL-031-SA5C-SB-9.0-10.0	SILVER	135	147	75.00-125.00	-	SILVER	Zn No Qual, >4x
SL-032-SA5C-SB-4.0-5.0)	THALLIUM	141	167	75.00-125.00	-	THALLIUM	
	VANADIUM	206	321	75.00-125.00	-	VANADIUM	
	ZINC	193	309	75.00-125.00	-	ZINC	
SL-032-SA5C-SB-4.0-5.0MS	ANTIMONY	53	53	75.00-125.00	-	ANTIMONY	
SL-032-SA5C-SB-4.0-5.0MSD	ARSENIC	184	334	75.00-125.00	25 (20.00)	ARSENIC	
(DUP11-SA5C-QC-120310	LEAD	187	337	75.00-125.00	31 (20.00)	LEAD	
SL-030-SA5C-SB-4.0-5.0							J(all detects)
SL-030-SA5C-SB-9.0-10.0							UJ(all non-detects)
SL-031-SA5C-SB-4.0-5.0							
SL-031-SA5C-SB-9.0-10.0							
SL-032-SA5C-SB-4.0-5.0)							
SL-032-SA5C-SB-4.0-5.0MSD	SELENIUM	-	137	75.00-125.00	-	SELENIUM	
(DUP11-SA5C-QC-120310							
SL-030-SA5C-SB-4.0-5.0							
SL-030-SA5C-SB-9.0-10.0							J(all detects)
SL-031-SA5C-SB-4.0-5.0							
SL-031-SA5C-SB-9.0-10.0							
SL-032-SA5C-SB-4.0-5.0)							
SL-032-SA5C-SB-4.0-5.0MSD	MOLYBDENUM	-	143	75.00-125.00	-	MOLYBDENUM	
(DUP11-SA5C-QC-120310							
SL-030-SA5C-SB-4.0-5.0							
SL-030-SA5C-SB-9.0-10.0							J(all detects)
SL-031-SA5C-SB-4.0-5.0							
SL-031-SA5C-SB-9.0-10.0							
SL-032-SA5C-SB-4.0-5.0)							
SL-032-SA5C-SB-4.0-5.0MS	BARIUM	289	549	75.00-125.00	-	BARIUM	
SL-032-SA5C-SB-4.0-5.0MSD							
(DUP11-SA5C-QC-120310							
SL-030-SA5C-SB-4.0-5.0							
SL-030-SA5C-SB-9.0-10.0							No Qual, >4x
SL-031-SA5C-SB-4.0-5.0							
SL-031-SA5C-SB-9.0-10.0							
SL-032-SA5C-SB-4.0-5.0)							

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-032-SA5C-SB-4.0-5.0MS	ALUMINUM	1774	1699	75.00-125.00	-	ALUMINUM	
SL-032-SA5C-SB-4.0-5.0MSD	CALCIUM	-	210	75.00-125.00	-	CALCIUM	
(DUP11-SA5C-QC-120310	IRON	1136	535	75.00-125.00	-	IRON	
SL-030-SA5C-SB-4.0-5.0	MAGNESIUM	-	138	75.00-125.00	-	MAGNESIUM	
SL-030-SA5C-SB-9.0-10.0	POTASSIUM	131	135	75.00-125.00	-	POTASSIUM	J(all detects)
SL-031-SA5C-SB-4.0-5.0	TITANIUM	349	355	75.00-125.00	-	TITANIUM	
SL-031-SA5C-SB-9.0-10.0							Al, Ca, Fe, Mg, Ti No Qual, >4x
SL-032-SA5C-SB-4.0-5.0)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE028 **Laboratory: LL**

EDD Filename: DE028_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-032-SA5C-SB-4.0-5.0MS (SL-032-SA5C-SB-4.0-5.0)	FLUORIDE Nitrate-NO3	170 147	- -	80.00-120.00 80.00-120.00	- -	FLUORIDE Nitrate-NO3	J(all detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-032-SA5C-SB-4.0-5.0MS SL-032-SA5C-SB-4.0-5.0MSD (SL-032-SA5C-SB-4.0-5.0)	Chlorotrifluoroethylene	162	162	70.00-130.00	-	Chlorotrifluoroethylene	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE028 Laboratory: LL

EDD Filename: DE028_v1 eQAPP Name: CDM_SSFL_110509

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-032-SA5C-SB-4.0-5.0DUP (SL-032-SA5C-SB-4.0-5.0)	FLUORIDE	4.2	2.2 mg/Kg	J (all detects) UJ (all non-detects)

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-032-SA5C-SB-4.0-5.0DUP (DUP11-SA5C-QC-120310 SL-030-SA5C-SB-4.0-5.0 SL-030-SA5C-SB-9.0-10.0 SL-031-SA5C-SB-4.0-5.0 SL-031-SA5C-SB-9.0-10.0 SL-032-SA5C-SB-4.0-5.0)	Zirconium	39	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-032-SA5C-SB-4.0-5.0DUP (DUP11-SA5C-QC-120310 SL-030-SA5C-SB-4.0-5.0 SL-030-SA5C-SB-9.0-10.0 SL-031-SA5C-SB-4.0-5.0 SL-031-SA5C-SB-9.0-10.0 SL-032-SA5C-SB-4.0-5.0)	ANTIMONY	35	20.00	J(all detects) UJ(all non-detects) Sb, Cd, Se, Tl No Qual OK by difference
	ARSENIC	25	20.00	
	BARIUM	21	20.00	
	CADMIUM	30	20.00	
	CHROMIUM	24	20.00	
	COBALT	38	20.00	
	COPPER	24	20.00	
	LEAD	29	20.00	
	NICKEL	26	20.00	
	SELENIUM	28	20.00	
	THALLIUM	21	20.00	
	VANADIUM	27	20.00	
	ZINC	23	20.00	

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE028 **Laboratory: LL**

EDD Filename: DE028_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY29Y211328A (TB-120310)	1,2-DIBROMO-3-CHLOROPROP	-	126	66.00-120.00	-	1,2-DIBROMO-3-CHLOROPRO	J(all detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B09Q210223A (DUP11-SA5C-QC-120310 SL-030-SA5C-SB-4.0-5.0 SL-030-SA5C-SB-9.0-10.0 SL-031-SA5C-SB-4.0-5.0 SL-031-SA5C-SB-9.0-10.0 SL-032-SA5C-SB-4.0-5.0)	Chlorotrifluoroethylene	140	-	22.00-131.00	-	Chlorotrifluoroethylene	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE028 **Laboratory: LL**

EDD Filename: PrepDE028_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-032-SA5C-SB-4.0-5.0	DUP11-SA5C-QC-120310			
MOISTURE	7.8	8.0	3		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-032-SA5C-SB-4.0-5.0	DUP11-SA5C-QC-120310			
FLUORIDE	4.9	10.5	73	50.00	J(all detects)
Nitrate-NO3	1.7	4.3	87	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-032-SA5C-SB-4.0-5.0	DUP11-SA5C-QC-120310			
ALUMINUM	20000	18300	9	50.00	
CALCIUM	3030	1990	41	50.00	
IRON	24900	23000	8	50.00	
LITHIUM	28.1	26.4	6	50.00	
MAGNESIUM	4960	4760	4	50.00	
MANGANESE	155	169	9	50.00	
PHOSPHORUS	136	136	0	50.00	No Qualifiers Applied
POTASSIUM	1970	2090	6	50.00	
SODIUM	594	648	9	50.00	
STRONTIUM	24.4	22.0	10	50.00	
TIN	3.20	2.63	20	50.00	
TITANIUM	1320	1260	5	50.00	
Zirconium	1.30	1.22	6	50.00	
BORON	5.21 U	7.82	200	50.00	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-032-SA5C-SB-4.0-5.0	DUP11-SA5C-QC-120310			
ARSENIC	6.97	8.20	16	50.00	
BARIUM	132	125	5	50.00	
BERYLLIUM	0.961	0.853	12	50.00	
CADMIUM	0.0479	0.0623	26	50.00	
CHROMIUM	23.9	25.7	7	50.00	
COBALT	6.69	4.49	39	50.00	
COPPER	8.82	9.56	8	50.00	
LEAD	7.15	8.17	13	50.00	No Qualifiers Applied
MOLYBDENUM	0.727	0.834	14	50.00	
NICKEL	10.8	11.3	5	50.00	
SELENIUM	0.177	0.111	46	50.00	
SILVER	0.0253	0.0279	10	50.00	
THALLIUM	0.376	0.396	5	50.00	
VANADIUM	41.0	44.0	7	50.00	
ZINC	47.7	56.6	17	50.00	
ANTIMONY	0.140	0.213 U	200	50.00	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE028 Laboratory: LL

EDD Filename: PrepDE028_v1 eQAPP Name: CDM_SSFL_110509

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-032-SA5C-SB-4.0-5.0	DUP11-SA5C-QC-120310			
HEXAVALENT CHROMIUM	1.1 U	2.3	200	50.00	J(all detects) UJ(all non-detects)

Method: 8015B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-032-SA5C-SB-4.0-5.0	DUP11-SA5C-QC-120310			
ETHANOL	110	540 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-032-SA5C-SB-4.0-5.0	DUP11-SA5C-QC-120310			
METHYLENE CHLORIDE	0.68	0.42	47	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-032-SA5C-SB-4.0-5.0	DUP11-SA5C-QC-120310			
PH	7.16	8.42	16	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-032-SA5C-SB-4.0-5.0	DUP11-SA5C-QC-120310			
Oxidation Reduction Potential	435	429	1		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE028 **Laboratory: LL**

EDD Filename: DE028_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-031-SA5C-SB-9.0-10.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)

Method: 314.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-031-SA5C-SB-4.0-5.0	PERCHLORATE	J	16.3	33.8	PQL	ug/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP11-SA5C-QC-120310	TIN	J	2.63	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.22	5.28	PQL	mg/Kg	
SL-030-SA5C-SB-4.0-5.0	TIN	J	3.18	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.64	5.39	PQL	mg/Kg	
SL-030-SA5C-SB-9.0-10.0	TIN	J	2.86	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.64	5.63	PQL	mg/Kg	
SL-031-SA5C-SB-4.0-5.0	BORON	J	2.85	5.52	PQL	mg/Kg	J (all detects)
	SODIUM	J	92.4	110	PQL	mg/Kg	
	TIN	J	2.97	11.0	PQL	mg/Kg	
	Zirconium	J	1.51	5.52	PQL	mg/Kg	
SL-031-SA5C-SB-9.0-10.0	TIN	J	2.91	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.42	5.68	PQL	mg/Kg	
SL-032-SA5C-SB-4.0-5.0	TIN	J	3.20	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.30	5.21	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP11-SA5C-QC-120310	CADMIUM	J	0.0623	0.107	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.111	0.426	PQL	mg/Kg	
	SILVER	J	0.0279	0.107	PQL	mg/Kg	
SL-030-SA5C-SB-4.0-5.0	ANTIMONY	J	0.0779	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.134	0.436	PQL	mg/Kg	
	SILVER	J	0.0411	0.109	PQL	mg/Kg	
SL-030-SA5C-SB-9.0-10.0	SELENIUM	J	0.0569	0.455	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0567	0.114	PQL	mg/Kg	
SL-031-SA5C-SB-4.0-5.0	ANTIMONY	J	0.126	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.135	0.437	PQL	mg/Kg	
	SILVER	J	0.0345	0.109	PQL	mg/Kg	
SL-031-SA5C-SB-9.0-10.0	ANTIMONY	J	0.111	0.227	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0938	0.114	PQL	mg/Kg	
	SELENIUM	J	0.0670	0.455	PQL	mg/Kg	
	SILVER	J	0.0775	0.114	PQL	mg/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE028 **Laboratory: LL**

EDD Filename: DE028_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5C-SB-4.0-5.0	ANTIMONY	J	0.140	0.215	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0479	0.107	PQL	mg/Kg	
	SELENIUM	J	0.177	0.430	PQL	mg/Kg	
	SILVER	J	0.0253	0.107	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-031-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-030-SA5C-SB-9.0-10.0	MERCURY	J	0.0064	0.110	PQL	mg/Kg	J (all detects)
SL-031-SA5C-SB-9.0-10.0	MERCURY	J	0.0096	0.111	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5C-SB-4.0-5.0	ETHANOL	J	110	540	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-030-SA5C-SB-4.0-5.0	EFH (C15-C20)	J	0.46	1.3	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP11-SA5C-QC-120310	METHYLENE CHLORIDE	J	0.42	4.3	PQL	ug/Kg	J (all detects)
SL-030-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.60	3.9	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.08	3.9	PQL	ug/Kg	
SL-030-SA5C-SB-9.0-10.0	2-BUTANONE (MEK)	J	1.7	8.3	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.64	4.1	PQL	ug/Kg	
	TOLUENE	J	0.09	4.1	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE028 **Laboratory: LL**

EDD Filename: DE028_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-031-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.50	4.3	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.11	4.3	PQL	ug/Kg	
SL-031-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.50	3.9	PQL	ug/Kg	J (all detects)
SL-032-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.68	4.5	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-031-SA5C-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-030-SA5C-SB-4.0-5.0	BENZO(A)PYRENE	J	0.83	1.9	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	0.87	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	0.82	1.9	PQL	ug/Kg	
SL-030-SA5C-SB-9.0-10.0	BENZO(A)PYRENE	J	0.77	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.2	1.9	PQL	ug/Kg	
SL-031-SA5C-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.8	1.9	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.94	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	0.89	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.75	1.9	PQL	ug/Kg	
SL-031-SA5C-SB-9.0-10.0	CHRYSENE	J	0.59	1.9	PQL	ug/Kg	J (all detects)

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-031-SA5C-SB-4.0-5.0	FORMALDEHYDE	J	1200	1700	PQL	ug/Kg	J (all detects)

Method: 8330A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-031-SA5C-SB-4.0-5.0	1,3-DINITROBENZENE	J	92	170	PQL	ug/Kg	J (all detects)

LDC #: 25337B4 **VALIDATION COMPLETENESS WORKSHEET** Date: 5-4-11
SDG #: DE028 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: QR
2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Ti, Zn >4x)
VII.	Duplicate Sample Analysis	N	D, R (Sb, Cd, Se, Tl, Zr <5x RL)
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A (Cu, Fe)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-030-SA5C-SB-9.0-10.0	11		21	PBS	31	
2	SL-030-SA5C-SB-4.0-5.0	12		22		32	
3	SL-031-SA5C-SB-9.0-10.0	13		23		33	
4	SL-031-SA5C-SB-4.0-5.0	14		24		34	
5	SL-032-SA5C-SB-4.0-5.0	15		25		35	
6	DUP11-SA5C-QC-120310	16		26		36	
7	SL-032-SA5C-SB-4.0-5.0MS	17		27		37	
8	SL-032-SA5C-SB-4.0-5.0MSD	18		28		38	
9	SL-032-SA5C-SB-4.0-5.0DUP	19		29		39	
10		20		30		40	

Notes:

LDC #: 25337B4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: CS
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6020/7000) Soil preparation factor applied: 100x x (ICPMS: 2xdil)

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

					Sample Identification									
Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Blank Action Limit	2	3	4	5						
Sb			0.32	0.32	0.078	0.11	0.13	0.14						

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE028
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6156146BKG Serial Dilution Lab Sample ID: 6156146L
Batch ID(s): P34108C, P34126A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		192113.8000		177510.1000		8		P
Antimony	121	0.6498	B	1.5000	U	100		MS
Arsenic	75	32.4700		30.9900		5		MS
Barium	137	616.5000		621.5000		1		MS
Beryllium	9	4.4760		4.5875		2		MS
Boron		8.9000	U	48.6000	B	100		P
Cadmium	111	0.2229	B	0.9685	B	334		MS
Calcium		29067.8700		28335.3500		3		P
Chromium	52	111.3000		122.0000		10		MS
Cobalt	59	31.1300		34.0600		9		MS
Copper	63	41.0500		45.5400		11	E	MS
Iron		238337.9400		211855.5000		11	E	P
Lead	208	33.3000		32.5700		2		MS
Lithium		269.5400		260.3500		3		P
Magnesium		47599.3900		45227.2500		5		P
Manganese		1489.8600		1481.6000		1		P
Molybdenum	98	3.3840		2.5950		23		MS
Nickel	60	50.3100		54.8000		9		MS
Phosphorus		1301.5800		1245.1000		4		P
Potassium		18887.0200		18711.8000		1		P
Selenium	78	0.8263	B	1.0000	U	100		MS
Silver	107	0.1180	B	0.3000	U	100		MS
Sodium		5697.7700		5349.0000		6		P
Strontium		233.5500		222.0000		5		P
Thallium	203	1.7520		1.4185	B	19		MS
Tin		30.6900	B	50.0000	U	100		P
Titanium		2537.4100		2560.9500		1		P
Vanadium	51	190.9000		204.2500		7		MS
Zinc	66	221.9000		225.3500		2		MS
Zirconium		12.4200	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	3060A	7199	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	3546	1625C	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	3550B	8015B	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	3550B	8015M	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	3550B	8082	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	3550B	8270C	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	3550B	8270C SIM	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	5035	8015M	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	5035	8260B	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	5035	8260B SIM	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	8330	8330A	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	Gen Prep	9045M	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	METHOD	300.0	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	METHOD	314.0	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	METHOD	8015B	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	METHOD	8015M	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	METHOD	8315A	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0	6157195	N	METHOD	9012B	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	3060A	7199	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	3546	1625C	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	3550B	8015B	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	3550B	8015M	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	3550B	8082	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	3550B	8270C	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	3550B	8270C SIM	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	5035	8015M	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	5035	8260B	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	5035	8260B SIM	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	8330	8330A	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	METHOD	300.0	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	METHOD	314.0	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	METHOD	8015B	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	METHOD	8015M	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	METHOD	8315A	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MS	6157196	MS	METHOD	9012B	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MSD	6157197	MSD	3546	1625C	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MSD	6157197	MSD	3550B	8015B	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MSD	6157197	MSD	3550B	8015M	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MSD	6157197	MSD	3550B	8082	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MSD	6157197	MSD	3550B	8270C	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MSD	6157197	MSD	3550B	8270C SIM	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MSD	6157197	MSD	5035	8015M	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MSD	6157197	MSD	5035	8260B	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MSD	6157197	MSD	5035	8260B SIM	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MSD	6157197	MSD	8330	8330A	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MSD	6157197	MSD	METHOD	8015B	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MSD	6157197	MSD	METHOD	8015M	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0MSD	6157197	MSD	METHOD	8315A	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0DUP	6157198	DUP	3060A	7199	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0DUP	6157198	DUP	Gen Prep	9045M	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0DUP	6157198	DUP	METHOD	300.0	IV
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0DUP	6157198	DUP	METHOD	314.0	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Dec-2010	SL-028-SA5C-SB-4.0-5.0DUP	6157198	DUP	METHOD	9012B	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	3050B	6010B	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	3050B	6020	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	3060A	7199	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	3546	1625C	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	3550B	8015B	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	3550B	8015M	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	3550B	8082	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	3550B	8270C	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	3550B	8270C SIM	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	5035	8015M	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	5035	8260B	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	5035	8260B SIM	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	8330	8330A	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	Gen Prep	9045M	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	METHOD	300.0	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	METHOD	314.0	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	METHOD	7471A	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	METHOD	8015B	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	METHOD	8015M	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	METHOD	8315A	IV
06-Dec-2010	DUP12-SA5C-QC-120610	6157193	N	METHOD	9012B	IV
06-Dec-2010	SL-024-SA5C-SB-4.0-5.0	6157199	N	3050B	6010B	IV
06-Dec-2010	SL-024-SA5C-SB-4.0-5.0	6157199	N	3050B	6020	IV
06-Dec-2010	SL-024-SA5C-SB-4.0-5.0	6157199	N	3060A	7199	IV
06-Dec-2010	SL-024-SA5C-SB-4.0-5.0	6157199	N	3550B	8082	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Dec-2010	SL-024-SA5C-SB-4.0-5.0	6157199	N	3550B	8270C	IV
06-Dec-2010	SL-024-SA5C-SB-4.0-5.0	6157199	N	3550B	8270C SIM	IV
06-Dec-2010	SL-024-SA5C-SB-4.0-5.0	6157199	N	5035	8260B	IV
06-Dec-2010	SL-024-SA5C-SB-4.0-5.0	6157199	N	5035	8260B SIM	IV
06-Dec-2010	SL-024-SA5C-SB-4.0-5.0	6157199	N	Gen Prep	9045M	IV
06-Dec-2010	SL-024-SA5C-SB-4.0-5.0	6157199	N	METHOD	300.0	IV
06-Dec-2010	SL-024-SA5C-SB-4.0-5.0	6157199	N	METHOD	314.0	IV
06-Dec-2010	SL-024-SA5C-SB-4.0-5.0	6157199	N	METHOD	7471A	IV
06-Dec-2010	SL-024-SA5C-SB-9.0-10.0	6157203	N	3050B	6010B	IV
06-Dec-2010	SL-024-SA5C-SB-9.0-10.0	6157203	N	3050B	6020	IV
06-Dec-2010	SL-024-SA5C-SB-9.0-10.0	6157203	N	3060A	7199	IV
06-Dec-2010	SL-024-SA5C-SB-9.0-10.0	6157203	N	3550B	8082	IV
06-Dec-2010	SL-024-SA5C-SB-9.0-10.0	6157203	N	3550B	8270C	IV
06-Dec-2010	SL-024-SA5C-SB-9.0-10.0	6157203	N	3550B	8270C SIM	IV
06-Dec-2010	SL-024-SA5C-SB-9.0-10.0	6157203	N	Gen Prep	9045M	IV
06-Dec-2010	SL-024-SA5C-SB-9.0-10.0	6157203	N	METHOD	300.0	IV
06-Dec-2010	SL-024-SA5C-SB-9.0-10.0	6157203	N	METHOD	314.0	IV
06-Dec-2010	SL-024-SA5C-SB-9.0-10.0	6157203	N	METHOD	7471A	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	3050B	6010B	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	3050B	6020	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	3060A	7199	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	3546	1625C	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	3550B	8015B	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	3550B	8015M	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	3550B	8082	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	3550B	8270C	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	3550B	8270C SIM	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	5035	8015M	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	5035	8260B	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	5035	8260B SIM	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	8330	8330A	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	Gen Prep	9045M	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	METHOD	300.0	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	METHOD	314.0	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	METHOD	7471A	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	METHOD	8015B	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	METHOD	8015M	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	METHOD	8315A	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0	6157194	N	METHOD	9012B	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0DUP	P157194D221140A	DUP	3050B	6020	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0DUP	P157194D221140B	DUP	3050B	6020	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0DUP	P157194D221140C	DUP	3050B	6020	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0DUP	P157194D221140D	DUP	3050B	6020	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0MSD	P157194M221146A	MSD	3050B	6020	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0MSD	P157194M221146B	MSD	3050B	6020	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0MSD	P157194M221146C	MSD	3050B	6020	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0MSD	P157194M221146D	MSD	3050B	6020	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0MS	P157194R221143A	MS	3050B	6020	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0MS	P157194R221143B	MS	3050B	6020	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0MS	P157194R221143C	MS	3050B	6020	IV
06-Dec-2010	SL-018-SA5C-SB-4.0-5.0MS	P157194R221143D	MS	3050B	6020	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	3050B	6010B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	3050B	6020	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	3060A	7199	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	3546	1625C	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	3550B	8015B	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	3550B	8015M	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	3550B	8082	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	3550B	8270C	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	3550B	8270C SIM	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	5035	8015M	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	5035	8260B	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	5035	8260B SIM	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	8330	8330A	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	Gen Prep	9045M	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	METHOD	300.0	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	METHOD	314.0	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	METHOD	6850	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	METHOD	7471A	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	METHOD	8015B	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	METHOD	8015M	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	METHOD	8315A	IV
06-Dec-2010	SL-025-SA5C-SB-4.0-5.0	6157201	N	METHOD	9012B	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	3050B	6010B	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	3050B	6020	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	3060A	7199	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	3546	1625C	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	3550B	8015B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	3550B	8015M	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	3550B	8082	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	3550B	8270C	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	3550B	8270C SIM	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	5035	8015M	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	5035	8260B	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	5035	8260B SIM	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	8330	8330A	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	Gen Prep	9045M	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	METHOD	300.0	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	METHOD	314.0	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	METHOD	7471A	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	METHOD	8015B	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	METHOD	8015M	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	METHOD	8315A	IV
06-Dec-2010	SL-025-SA5C-SB-9.0-10.0	6157202	N	METHOD	9012B	IV
06-Dec-2010	TB-120610	6157200	TB	5030B	8015M	IV
06-Dec-2010	TB-120610	6157200	TB	5030B	8260B	IV
06-Dec-2010	TB-120610	6157200	TB	5030B	8260B SIM	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE029 Laboratory: LL

EDD Filename: PrepDE029_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP12-SA5C-QC-120610 **Collected:** 12/6/2010 9:57:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.9		0.91	MDL	1.1	PQL	mg/Kg	J	FD
Nitrate-NO3	3.6		0.91	MDL	1.7	PQL	mg/Kg	J	FD

Sample ID: SL-018-SA5C-SB-4.0-5.0 **Collected:** 12/6/2010 1:37:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.4	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5C-SB-4.0-5.0 **Collected:** 12/6/2010 11:32:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.6		0.88	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-024-SA5C-SB-9.0-10.0 **Collected:** 12/6/2010 11:36:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.2		0.87	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-025-SA5C-SB-4.0-5.0 **Collected:** 12/6/2010 3:13:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.6		0.89	MDL	1.1	PQL	mg/Kg	J	Q, E
Nitrate-NO3	2.2		0.89	MDL	1.7	PQL	mg/Kg	J	Q, E

Sample ID: SL-025-SA5C-SB-9.0-10.0 **Collected:** 12/6/2010 3:24:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q, E
Nitrate-NO3	1.8		0.88	MDL	1.7	PQL	mg/Kg	J	Q, E

Sample ID: SL-028-SA5C-SB-4.0-5.0 **Collected:** 12/6/2010 9:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.88	U	0.88	MDL	1.1	PQL	mg/Kg	UJ	E, FD
Nitrate-NO3	15.8		0.88	MDL	1.7	PQL	mg/Kg	J	Q, E, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory:** LL

EDD Filename: PrepDE029_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP12-SA5C-QC-120610 ***Collected:*** 12/6/2010 9:57:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	304		0.619	MDL	11.0	PQL	mg/Kg	J	E
TIN	2.43	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.69	J	0.928	MDL	5.52	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5C-SB-4.0-5.0 ***Collected:*** 12/6/2010 1:37:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	345		0.632	MDL	11.3	PQL	mg/Kg	J	E
TIN	2.41	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	1.02	J	0.948	MDL	5.64	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5C-SB-4.0-5.0 ***Collected:*** 12/6/2010 11:32:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.19	J	0.978	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5C-SB-4.0-5.0 ***Collected:*** 12/6/2010 11:32:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	99.2		0.615	MDL	11.0	PQL	mg/Kg	J	E
SODIUM	85.9	J	41.0	MDL	110	PQL	mg/Kg	J	Z
TIN	2.62	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	0.978	J	0.923	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5C-SB-9.0-10.0 ***Collected:*** 12/6/2010 11:36:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.05	J	0.971	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5C-SB-9.0-10.0 ***Collected:*** 12/6/2010 11:36:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	88.6		0.611	MDL	10.9	PQL	mg/Kg	J	E
TIN	2.82	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.04	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: PrepDE029_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-025-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 3:13:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.91	J	0.975	MDL	5.48	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 3:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	279		0.613	MDL	11.0	PQL	mg/Kg	J	E
TIN	2.76	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.61	J	0.920	MDL	5.48	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 3:24:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.28	J	0.972	MDL	5.46	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 3:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	317		0.611	MDL	10.9	PQL	mg/Kg	J	E
TIN	2.39	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP12-SA5C-QC-120610 *Collected:* 12/6/2010 9:57:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.123	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: DUP12-SA5C-QC-120610 *Collected:* 12/6/2010 9:57:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	99.6		0.120	MDL	0.446	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory:** LL

EDD Filename: PrepDE029_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP12-SA5C-QC-120610 ***Collected:*** 12/6/2010 9:57:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0880	J	0.0669	MDL	0.223	PQL	mg/Kg	J	Z, Q
ARSENIC	5.43		0.0669	MDL	0.446	PQL	mg/Kg	J	Q
BERYLLIUM	0.766		0.0178	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	24.8		0.134	MDL	0.446	PQL	mg/Kg	J	Q, A
COBALT	6.88		0.0223	MDL	0.112	PQL	mg/Kg	J	A
COPPER	10.9		0.0736	MDL	0.446	PQL	mg/Kg	J	Q, A
LEAD	8.03		0.0116	MDL	0.223	PQL	mg/Kg	J	Q
NICKEL	12.8		0.112	MDL	0.446	PQL	mg/Kg	J	Q
SILVER	0.0426	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	48.4		0.0245	MDL	0.112	PQL	mg/Kg	J	Q, A
ZINC	59.7		0.625	MDL	3.35	PQL	mg/Kg	J	E

Sample ID: SL-018-SA5C-SB-4.0-5.0 ***Collected:*** 12/6/2010 1:37:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.153	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5C-SB-4.0-5.0 ***Collected:*** 12/6/2010 1:37:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	94.3		0.121	MDL	0.447	PQL	mg/Kg	J	E, A

Sample ID: SL-018-SA5C-SB-4.0-5.0 ***Collected:*** 12/6/2010 1:37:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0739	J	0.0671	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	4.52		0.0671	MDL	0.447	PQL	mg/Kg	J	Q
BERYLLIUM	0.585		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	19.5		0.134	MDL	0.447	PQL	mg/Kg	J	Q, A
COBALT	5.03		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	8.00		0.0738	MDL	0.447	PQL	mg/Kg	J	Q, A
LEAD	6.00		0.0116	MDL	0.224	PQL	mg/Kg	J	Q
NICKEL	10.4		0.112	MDL	0.447	PQL	mg/Kg	J	Q
SILVER	0.0335	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	36.8		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory:** LL

EDD Filename: PrepDE029_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-018-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 1:37:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	59.9		0.626	MDL	3.35	PQL	mg/Kg	J	E

Sample ID: SL-024-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 11:32:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0718	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 11:32:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	118		0.115	MDL	0.427	PQL	mg/Kg	J	E, A

Sample ID: SL-024-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 11:32:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0919	J	0.0640	MDL	0.213	PQL	mg/Kg	J	Z, Q
ARSENIC	6.14		0.0640	MDL	0.427	PQL	mg/Kg	J	Q
BERYLLIUM	0.893		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	20.6		0.128	MDL	0.427	PQL	mg/Kg	J	Q, A
COBALT	3.93		0.0213	MDL	0.107	PQL	mg/Kg	J	A
COPPER	6.10		0.0704	MDL	0.427	PQL	mg/Kg	J	Q, A
LEAD	7.51		0.0111	MDL	0.213	PQL	mg/Kg	J	Q
NICKEL	9.68		0.107	MDL	0.427	PQL	mg/Kg	J	Q
SILVER	0.0444	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	42.0		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, A
ZINC	32.7		0.597	MDL	3.20	PQL	mg/Kg	J	E

Sample ID: SL-024-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 11:36:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0486	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory:** LL

EDD Filename: PrepDE029_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-024-SA5C-SB-9.0-10.0 **Collected:** 12/6/2010 11:36:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	66.1		0.117	MDL	0.432	PQL	mg/Kg	J	E, A

Sample ID: SL-024-SA5C-SB-9.0-10.0 **Collected:** 12/6/2010 11:36:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0648	U	0.0648	MDL	0.216	PQL	mg/Kg	UJ	Q
ARSENIC	5.72		0.0648	MDL	0.432	PQL	mg/Kg	J	Q
BERYLLIUM	0.686		0.0173	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.0430	J	0.0389	MDL	0.108	PQL	mg/Kg	J	Z
CHROMIUM	19.4		0.130	MDL	0.432	PQL	mg/Kg	J	Q, A
COBALT	3.79		0.0216	MDL	0.108	PQL	mg/Kg	J	A
COPPER	6.18		0.0713	MDL	0.432	PQL	mg/Kg	J	Q, A
LEAD	6.17		0.0112	MDL	0.216	PQL	mg/Kg	J	Q
NICKEL	8.97		0.108	MDL	0.432	PQL	mg/Kg	J	Q
SILVER	0.0229	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	40.7		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A
ZINC	50.2		0.605	MDL	3.24	PQL	mg/Kg	J	E

Sample ID: SL-025-SA5C-SB-4.0-5.0 **Collected:** 12/6/2010 3:13:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.154	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5C-SB-4.0-5.0 **Collected:** 12/6/2010 3:13:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	114		0.117	MDL	0.434	PQL	mg/Kg	J	E, A

Sample ID: SL-025-SA5C-SB-4.0-5.0 **Collected:** 12/6/2010 3:13:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0850	J	0.0651	MDL	0.217	PQL	mg/Kg	J	Z, Q
ARSENIC	5.61		0.0651	MDL	0.434	PQL	mg/Kg	J	Q
BERYLLIUM	0.697		0.0174	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	26.2		0.130	MDL	0.434	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE029 Laboratory: LL

EDD Filename: PrepDE029_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-025-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 3:13:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	7.11		0.0217	MDL	0.108	PQL	mg/Kg	J	A
COPPER	11.7		0.0716	MDL	0.434	PQL	mg/Kg	J	Q, A
LEAD	7.57		0.0113	MDL	0.217	PQL	mg/Kg	J	Q
NICKEL	13.9		0.108	MDL	0.434	PQL	mg/Kg	J	Q
SILVER	0.0490	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	47.5		0.0239	MDL	0.108	PQL	mg/Kg	J	Q, A
ZINC	70.9		0.607	MDL	3.25	PQL	mg/Kg	J	E

Sample ID: SL-025-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 3:24:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.113	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 3:24:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	110		0.117	MDL	0.432	PQL	mg/Kg	J	E, A

Sample ID: SL-025-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 3:24:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0763	J	0.0649	MDL	0.216	PQL	mg/Kg	J	Z, Q
ARSENIC	6.25		0.0649	MDL	0.432	PQL	mg/Kg	J	Q
BERYLLIUM	0.683		0.0173	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	23.2		0.130	MDL	0.432	PQL	mg/Kg	J	Q, A
COBALT	6.87		0.0216	MDL	0.108	PQL	mg/Kg	J	A
COPPER	11.5		0.0713	MDL	0.432	PQL	mg/Kg	J	Q, A
LEAD	6.93		0.0112	MDL	0.216	PQL	mg/Kg	J	Q
NICKEL	12.3		0.108	MDL	0.432	PQL	mg/Kg	J	Q
SILVER	0.0502	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	43.7		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A
ZINC	74.4		0.605	MDL	3.24	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: PrepDE029_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-024-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 11:32:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP12-SA5C-QC-120610 *Collected:* 12/6/2010 9:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0052	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 1:37:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0045	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 11:32:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0060	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 11:36:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0033	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 3:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0127	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 3:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0057	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: PrepDE029_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: DUP12-SA5C-QC-120610 *Collected:* 12/6/2010 9:57:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	168		19.0	MDL	37.9	PQL	ng/Kg	J	FD

Sample ID: SL-018-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 1:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	37.7	J	19.0	MDL	38.0	PQL	ng/Kg	J	Z

Sample ID: SL-025-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 3:13:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	27.2	J	18.6	MDL	37.2	PQL	ng/Kg	J	Z

Sample ID: SL-028-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	51.2		18.4	MDL	36.8	PQL	ng/Kg	J	FD

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: DUP12-SA5C-QC-120610 *Collected:* 12/6/2010 9:57:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.49	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z, FD

Sample ID: SL-028-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 9:50:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	0.44	U	0.44	MDL	1.3	PQL	mg/Kg	R	Q
EFH (C15-C20)	0.44	U	0.44	MDL	1.3	PQL	mg/Kg	UJ	FD
EFH (C8-C11)	0.44	U	0.44	MDL	1.3	PQL	mg/Kg	R	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE029 Laboratory: LL

EDD Filename: PrepDE029_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP12-SA5C-QC-120610 *Collected:* 12/6/2010 9:57:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	FD
AROCLOR 1254	0.71	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, *XIII
AROCLOR 1260	1.6	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.5	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z, FD

Sample ID: SL-018-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 1:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.69	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.79	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-025-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 3:13:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.50	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, *XIII
AROCLOR 1260	0.56	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-025-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 3:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.60	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-028-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	0.67	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z, FD
AROCLOR 1254	1.1	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.3	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	7.0		1.1	MDL	3.6	PQL	ug/Kg	J	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory:** LL

EDD Filename: PrepDE029_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-028-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	UJ	Q

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: DUP12-SA5C-QC-120610 *Collected:* 12/6/2010 9:57:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.58	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(A)ANTHRACENE	2.8		0.76	MDL	1.9	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	6.8	U	6.8	MDL	20	PQL	ug/Kg	UJ	FD
CHRYSENE	3.6		0.38	MDL	1.9	PQL	ug/Kg	J	FD
Dimethylphthalate	17	J	6.8	MDL	20	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	6.7		0.76	MDL	1.9	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	0.86	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, FD
NAPHTHALENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	7.0		0.76	MDL	1.9	PQL	ug/Kg	J	FD
PYRENE	5.6		0.76	MDL	1.9	PQL	ug/Kg	J	FD

Sample ID: SL-018-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 1:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.94	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.78	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.77	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	0.91	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.80	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-024-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 11:36:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE029 Laboratory: LL

EDD Filename: PrepDE029_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-024-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 11:36:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.0	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-025-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 3:13:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.2	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.8	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.8	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-028-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(A)ANTHRACENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.96	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, Q
BENZO(K)FLUORANTHENE	0.75	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.6	MDL	20	PQL	ug/Kg	J	Z, FD
CHRYSENE	1.7	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z, FD
Dimethylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	FD
FLUORANTHENE	1.7	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
NAPHTHALENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
PHENANTHRENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	FD
PYRENE	1.7	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: PrepDE029_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8330A **Matrix: SO**

Sample ID: DUP12-SA5C-QC-120610 *Collected:* 12/6/2010 9:57:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DINITROBENZENE	57	U	57	MDL	170	PQL	ug/Kg	UJ	FD

Sample ID: SL-025-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 3:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HMX	140	U	140	MDL	410	PQL	ug/Kg	UJ	C
Tetryl	84	U	84	MDL	170	PQL	ug/Kg	UJ	C

Sample ID: SL-028-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DINITROBENZENE	260	*	55	MDL	170	PQL	ug/Kg	J	FD

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: DUP12-SA5C-QC-120610 *Collected:* 12/6/2010 9:57:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	110	U	110	MDL	570	PQL	ug/Kg	UJ	FD

Sample ID: SL-025-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 3:13:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	140	J	110	MDL	560	PQL	ug/Kg	J	Z
METHANOL	140	J	110	MDL	560	PQL	ug/Kg	J	Z

Sample ID: SL-025-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 3:24:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	130	J	110	MDL	550	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory:** LL

EDD Filename: PrepDE029_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-028-SA5C-SB-4.0-5.0 **Collected:** 12/6/2010 9:50:00 **Analysis Type:** REA4 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	130	J	110	MDL	550	PQL	ug/Kg	J	Z, FD

Method Category: VOA

Method: 8260B **Matrix:** AQ

Sample ID: TB-120610 **Collected:** 12/6/2010 4:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	2	U	2	MDL	10	PQL	ug/L	UJ	C
1,2-DIBROMO-3-CHLOROPROPANE	2	U	2	MDL	5	PQL	ug/L	UJ	C
2-HEXANONE	3	U	3	MDL	10	PQL	ug/L	UJ	C
4-METHYL-2-PENTANONE (MIBK)	3	U	3	MDL	10	PQL	ug/L	UJ	C
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
Chlorotrifluoroethylene	2	U	2	MDL	5	PQL	ug/L	UJ	C

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP12-SA5C-QC-120610 **Collected:** 12/6/2010 9:57:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.72	U	0.72	MDL	4.1	PQL	ug/Kg	UJ	C
2-HEXANONE	1.6	U	1.6	MDL	8.2	PQL	ug/Kg	UJ	C, C
4-METHYL-2-PENTANONE (MIBK)	0.40	U	0.40	MDL	8.2	PQL	ug/Kg	UJ	C
ACETONE	7.4	J	6.9	MDL	8.2	PQL	ug/Kg	J	Z, FD
Chlorotrifluoroethylene	0.51	U	0.51	MDL	5.1	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.53	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-018-SA5C-SB-4.0-5.0 **Collected:** 12/6/2010 1:37:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.73	U	0.73	MDL	4.2	PQL	ug/Kg	UJ	C
2-HEXANONE	1.7	U	1.7	MDL	8.4	PQL	ug/Kg	UJ	C, C
4-METHYL-2-PENTANONE (MIBK)	0.41	U	0.41	MDL	8.4	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE029 Laboratory: LL

EDD Filename: PrepDE029_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-018-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 1:37:00 *Analysis Type:* RES *Dilution:* 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlorotrifluoroethylene	0.52	U	0.52	MDL	5.2	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.47	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-024-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 11:32:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.79	U	0.79	MDL	4.5	PQL	ug/Kg	UJ	C
2-HEXANONE	1.8	U	1.8	MDL	9.1	PQL	ug/Kg	UJ	C, C
4-METHYL-2-PENTANONE (MIBK)	0.44	U	0.44	MDL	9.1	PQL	ug/Kg	UJ	C
Chlorotrifluoroethylene	0.57	U	0.57	MDL	5.7	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.45	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-025-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 3:13:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.69	U	0.69	MDL	3.9	PQL	ug/Kg	UJ	C
2-HEXANONE	1.6	U	1.6	MDL	7.8	PQL	ug/Kg	UJ	C, C
4-METHYL-2-PENTANONE (MIBK)	0.38	U	0.38	MDL	7.8	PQL	ug/Kg	UJ	C
Chlorotrifluoroethylene	0.49	U	0.49	MDL	4.9	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.63	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-025-SA5C-SB-9.0-10.0 *Collected:* 12/6/2010 3:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.64	U	0.64	MDL	3.7	PQL	ug/Kg	UJ	C
2-HEXANONE	1.5	U	1.5	MDL	7.3	PQL	ug/Kg	UJ	C, C
4-METHYL-2-PENTANONE (MIBK)	0.36	U	0.36	MDL	7.3	PQL	ug/Kg	UJ	C
ACETONE	7.1	J	6.1	MDL	7.3	PQL	ug/Kg	J	Z
Chlorotrifluoroethylene	0.46	U	0.46	MDL	4.6	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	1.5	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-028-SA5C-SB-4.0-5.0 *Collected:* 12/6/2010 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.76	U	0.76	MDL	4.3	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: PrepDE029_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-028-SA5C-SB-4.0-5.0** ***Collected:*** **12/6/2010 9:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.98**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
2-HEXANONE	1.7	U	1.7	MDL	8.7	PQL	ug/Kg	UJ	C, C
4-METHYL-2-PENTANONE (MIBK)	0.42	U	0.42	MDL	8.7	PQL	ug/Kg	UJ	C
ACETONE	7.3	U	7.3	MDL	8.7	PQL	ug/Kg	UJ	FD
Chlorotrifluoroethylene	0.54	U	0.54	MDL	5.4	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.87	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: PrepDE029_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*XIII	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: PrepDE029_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: PrepDE029_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE029

Method Blank Outlier Report

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: DE029_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34308BB221131	12/14/2010 11:31:00 AM	LITHIUM	0.50 mg/Kg	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-9.0-10.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0
P34308BB221623	12/12/2010 4:23:00 PM	ALUMINUM CALCIUM PHOSPHORUS TIN	6.22 mg/Kg 7.06 mg/Kg 0.819 mg/Kg 1.73 mg/Kg	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-9.0-10.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP12-SA5C-QC-120610(RES)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-018-SA5C-SB-4.0-5.0(RES)	TIN	2.41 mg/Kg	2.41U mg/Kg
SL-024-SA5C-SB-4.0-5.0(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-024-SA5C-SB-9.0-10.0(RES)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-025-SA5C-SB-4.0-5.0(RES)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-025-SA5C-SB-9.0-10.0(RES)	TIN	2.39 mg/Kg	2.39U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34326AB221128A	12/13/2010 11:28:00 AM	COPPER LEAD	0.284 mg/Kg 0.0130 mg/Kg	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-9.0-10.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB09B210138A	12/8/2010 1:38:00 AM	METHYLENE CHLORIDE TOLUENE	0.81 ug/Kg 0.1 ug/Kg	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-028-SA5C-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP12-SA5C-QC-120610(RES)	METHYLENE CHLORIDE	0.53 ug/Kg	4.1U ug/Kg
SL-018-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.47 ug/Kg	4.2U ug/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE029 Laboratory: LL

EDD Filename: DE029_v1 eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-024-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.45 ug/Kg	4.5U ug/Kg
SL-025-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.63 ug/Kg	3.9U ug/Kg
SL-025-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	3.7U ug/Kg
SL-028-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.87 ug/Kg	4.3U ug/Kg

Method: 8270C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA34B262002	12/13/2010 8:02:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	25 ug/Kg	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-9.0-10.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-028-SA5C-SB-4.0-5.0

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE029 Laboratory: LL

EDD Filename: DE029_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-028-SA5C-SB-4.0-5.0MSD (SL-028-SA5C-SB-4.0-5.0)	m-Terphenyl p-Terphenyl	- -	- -	75.00-125.00 75.00-125.00	23 (20.00) 21 (20.00)	m-Terphenyl p-Terphenyl	J (all detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-028-SA5C-SB-4.0-5.0MSD (SL-028-SA5C-SB-4.0-5.0)	EFH (C15-C20)	-	-	49.00-123.00	21 (20.00)	EFH (C15-C20)	J(all detects)
SL-028-SA5C-SB-4.0-5.0MS SL-028-SA5C-SB-4.0-5.0MSD (SL-028-SA5C-SB-4.0-5.0)	EFH (C12-C14) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	- -184 -449 -	0 507 1564 0	49.00-123.00 49.00-123.00 49.00-123.00 49.00-123.00	200 (20.00) 132 (20.00) 151 (20.00) 200 (20.00)	EFH (C12-C14) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	J(all detects) R(all non-detects) EFH (C21-C30), (C30-C40) No Qual, >4x

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-018-SA5C-SB-4.0-5.0MS SL-018-SA5C-SB-4.0-5.0MSD (DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-9.0-10.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0)	ARSENIC BERYLLIUM CHROMIUM COPPER LEAD NICKEL VANADIUM	170 128 145 126 195 138 197	139 - 138 126 135 - 169	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - -	ARSENIC BERYLLIUM CHROMIUM COPPER LEAD NICKEL VANADIUM	J(all detects)
SL-018-SA5C-SB-4.0-5.0MS SL-018-SA5C-SB-4.0-5.0MSD (DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-9.0-10.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0)	ANTIMONY ZINC	48 142	41 60	75.00-125.00 75.00-125.00	- -	ANTIMONY ZINC	J(all detects) UJ(all non-detects) Zn No Qual, >4x
SL-018-SA5C-SB-4.0-5.0MS SL-018-SA5C-SB-4.0-5.0MSD (DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-9.0-10.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0)	BARIUM	292	577	75.00-125.00	22 (20.00)	BARIUM	J(all detects) UJ(all non-detects) No Qual %R, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-028-SA5C-SB-4.0-5.0MS (SL-028-SA5C-SB-4.0-5.0)	BENZIDINE	30	-	35.00-141.00	-	BENZIDINE	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: DE029_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-028-SA5C-SB-4.0-5.0MSD (SL-028-SA5C-SB-4.0-5.0)	BENZO(G,H,I)PERYLENE Dimethylphthalate	- -	- 119	33.00-141.00 74.00-118.00	34 (30.00) -	BENZO(G,H,I)PERYLENE Dimethylphthalate	J(all detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-028-SA5C-SB-4.0-5.0MS (SL-024-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-9.0-10.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-028-SA5C-SB-4.0-5.0)	FLUORIDE	135	-	80.00-120.00	-	FLUORIDE	J(all detects)
SL-028-SA5C-SB-4.0-5.0MS (SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-028-SA5C-SB-4.0-5.0)	Nitrate-NO3	40	-	80.00-120.00	-	Nitrate-NO3	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-028-SA5C-SB-4.0-5.0MS SL-028-SA5C-SB-4.0-5.0MSD (SL-028-SA5C-SB-4.0-5.0)	Chlorotrifluoroethylene	167	170	70.00-130.00	-	Chlorotrifluoroethylene	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: DE029_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-028-SA5C-SB-4.0-5.0DUP (SL-024-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-9.0-10.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-028-SA5C-SB-4.0-5.0)	FLUORIDE Nitrate-NO3	3.22 11.2	2.2 mg/Kg 3.4 mg/Kg	J (all detects) UJ (all non-detects)

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-028-SA5C-SB-4.0-5.0DUP (DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-9.0-10.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-028-SA5C-SB-4.0-5.0)	HEXAVALENT CHROMIUM	200	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-018-SA5C-SB-4.0-5.0DUP (DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-9.0-10.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0)	ANTIMONY ZINC	200 27	20.00 20.00	J(all detects) UJ(all non-detects) Sb No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE029 Laboratory: LL

EDD Filename: PrepDE029_v1 eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY29Y211328A (TB-120610)	1,2-DIBROMO-3-CHLOROPROP	-	126	66.00-120.00	-	1,2-DIBROMO-3-CHLOROPRO	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P34326AQ221131A (DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-9.0-10.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0)	ANTIMONY	62	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B09Q210223A (DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-028-SA5C-SB-4.0-5.0)	Chlorotrifluoroethylene	140	-	22.00-131.00	-	Chlorotrifluoroethylene	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: DE029_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-028-SA5C-SB-4.0-5.0	DUP12-SA5C-QC-120610			
MOISTURE	9.4	12.1	25		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-028-SA5C-SB-4.0-5.0	DUP12-SA5C-QC-120610			
N-NITROSODIMETHYLAMINE	51.2	168	107	50.00	J(all detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-028-SA5C-SB-4.0-5.0	DUP12-SA5C-QC-120610			
FLUORIDE	1.1 U	3.9	200	50.00	J(all detects)
Nitrate-NO3	15.8	3.6	126	50.00	UJ(all non-detects)

Method: 8015B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-028-SA5C-SB-4.0-5.0	DUP12-SA5C-QC-120610			
ETHANOL	130	570 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-028-SA5C-SB-4.0-5.0	DUP12-SA5C-QC-120610			
EFH (C21-C30)	8.4	11	27	50.00	No Qualifiers Applied
EFH (C30-C40)	21	28	29	50.00	
EFH (C15-C20)	1.3 U	0.49	200	50.00	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-028-SA5C-SB-4.0-5.0	DUP12-SA5C-QC-120610			
AROCLOR 1254	1.1	0.71	43	50.00	No Qualifiers Applied
AROCLOR 1260	1.3	1.6	21	50.00	
AROCLOR 1248	0.67	1.9 U	200	50.00	J(all detects)
Aroclor 5460	7.0	2.5	95	50.00	UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: DE029_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-028-SA5C-SB-4.0-5.0	DUP12-SA5C-QC-120610			
METHYLENE CHLORIDE	0.87	0.53	49	50.00	No Qualifiers Applied
ACETONE	8.7 U	7.4	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-028-SA5C-SB-4.0-5.0	DUP12-SA5C-QC-120610			
BENZO(A)PYRENE	1.5	2.0	29	50.00	No Qualifiers Applied
BENZO(B)FLUORANTHENE	2.6	4.3	49	50.00	
BENZO(G,H,I)PERYLENE	0.96	1.0	4	50.00	
ANTHRACENE	1.8 U	0.58	200	50.00	J(all detects) UJ(all non-detects)
BENZO(A)ANTHRACENE	1.1	2.8	87	50.00	
BENZO(K)FLUORANTHENE	0.75	1.6	72	50.00	
BIS(2-ETHYLHEXYL)PHTHALATE	10	20 U	200	50.00	
CHRYSENE	1.7	3.6	72	50.00	
Dimethylphthalate	20 U	17	200	50.00	
FLUORANTHENE	1.7	6.7	119	50.00	
INDENO(1,2,3-CD)PYRENE	1.8 U	0.86	200	50.00	
NAPHTHALENE	1.8 U	1.4	200	50.00	
PHENANTHRENE	1.8 U	7.0	200	50.00	
PYRENE	1.7	5.6	107	50.00	

Method: 8330A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-028-SA5C-SB-4.0-5.0	DUP12-SA5C-QC-120610			
1,3-DINITROBENZENE	260	170 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-028-SA5C-SB-4.0-5.0	DUP12-SA5C-QC-120610			
PH	8.00	7.19	11	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-028-SA5C-SB-4.0-5.0	DUP12-SA5C-QC-120610			
Oxidation Reduction Potential	380	366	4		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: DE029_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-018-SA5C-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	37.7	38.0	PQL	ng/Kg	J (all detects)
SL-025-SA5C-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	27.2	37.2	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-018-SA5C-SB-4.0-5.0	Nitrate-NO3	J	1.4	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP12-SA5C-QC-120610	TIN	J	2.43	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.69	5.52	PQL	mg/Kg	
SL-018-SA5C-SB-4.0-5.0	TIN	J	2.41	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.02	5.64	PQL	mg/Kg	
SL-024-SA5C-SB-4.0-5.0	BORON	J	4.19	5.49	PQL	mg/Kg	J (all detects)
	SODIUM	J	85.9	110	PQL	mg/Kg	
	TIN	J	2.62	11.0	PQL	mg/Kg	
	Zirconium	J	0.978	5.49	PQL	mg/Kg	
SL-024-SA5C-SB-9.0-10.0	BORON	J	2.05	5.45	PQL	mg/Kg	J (all detects)
	TIN	J	2.82	10.9	PQL	mg/Kg	
	Zirconium	J	1.04	5.45	PQL	mg/Kg	
SL-025-SA5C-SB-4.0-5.0	BORON	J	4.91	5.48	PQL	mg/Kg	J (all detects)
	TIN	J	2.76	11.0	PQL	mg/Kg	
	Zirconium	J	1.61	5.48	PQL	mg/Kg	
SL-025-SA5C-SB-9.0-10.0	BORON	J	3.28	5.46	PQL	mg/Kg	J (all detects)
	TIN	J	2.39	10.9	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP12-SA5C-QC-120610	ANTIMONY	J	0.0880	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.123	0.446	PQL	mg/Kg	
	SILVER	J	0.0426	0.112	PQL	mg/Kg	
SL-018-SA5C-SB-4.0-5.0	ANTIMONY	J	0.0739	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.153	0.447	PQL	mg/Kg	
	SILVER	J	0.0335	0.112	PQL	mg/Kg	
SL-024-SA5C-SB-4.0-5.0	ANTIMONY	J	0.0919	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0718	0.427	PQL	mg/Kg	
	SILVER	J	0.0444	0.107	PQL	mg/Kg	
SL-024-SA5C-SB-9.0-10.0	CADMIUM	J	0.0430	0.108	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0486	0.432	PQL	mg/Kg	
	SILVER	J	0.0229	0.108	PQL	mg/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE029 **Laboratory:** LL

EDD Filename: DE029_v1 **eQAPP Name:** CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5C-SB-4.0-5.0	ANTIMONY	J	0.0850	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.154	0.434	PQL	mg/Kg	
	SILVER	J	0.0490	0.108	PQL	mg/Kg	
SL-025-SA5C-SB-9.0-10.0	ANTIMONY	J	0.0763	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.113	0.432	PQL	mg/Kg	
	SILVER	J	0.0502	0.108	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.41	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP12-SA5C-QC-120610	MERCURY	J	0.0052	0.108	PQL	mg/Kg	J (all detects)
SL-018-SA5C-SB-4.0-5.0	MERCURY	J	0.0045	0.111	PQL	mg/Kg	J (all detects)
SL-024-SA5C-SB-4.0-5.0	MERCURY	J	0.0060	0.107	PQL	mg/Kg	J (all detects)
SL-024-SA5C-SB-9.0-10.0	MERCURY	J	0.0033	0.105	PQL	mg/Kg	J (all detects)
SL-025-SA5C-SB-4.0-5.0	MERCURY	J	0.0127	0.112	PQL	mg/Kg	J (all detects)
SL-025-SA5C-SB-9.0-10.0	MERCURY	J	0.0057	0.107	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5C-SB-4.0-5.0	ETHANOL	J	140	560	PQL	ug/Kg	J (all detects)
	METHANOL	J	140	560	PQL	ug/Kg	
SL-025-SA5C-SB-9.0-10.0	ETHANOL	J	130	550	PQL	ug/Kg	J (all detects)
SL-028-SA5C-SB-4.0-5.0	ETHANOL	J	130	550	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP12-SA5C-QC-120610	EFH (C15-C20)	J	0.49	1.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: DE029_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP12-SA5C-QC-120610	AROCLOR 1254	J	0.71	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	1.6	1.9	PQL	ug/Kg	
	Aroclor 5460	J	2.5	3.8	PQL	ug/Kg	
SL-018-SA5C-SB-4.0-5.0	AROCLOR 1254	J	0.69	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	0.79	1.9	PQL	ug/Kg	
SL-025-SA5C-SB-4.0-5.0	AROCLOR 1254	J	0.50	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	0.56	1.9	PQL	ug/Kg	
SL-025-SA5C-SB-9.0-10.0	AROCLOR 1254	J	0.60	1.9	PQL	ug/Kg	J (all detects)
SL-028-SA5C-SB-4.0-5.0	AROCLOR 1248	J	0.67	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1254	J	1.1	1.9	PQL	ug/Kg	
	AROCLOR 1260	J	1.3	1.9	PQL	ug/Kg	

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP12-SA5C-QC-120610	ACETONE	J	7.4	8.2	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.53	4.1	PQL	ug/Kg	
SL-018-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.47	4.2	PQL	ug/Kg	J (all detects)
SL-024-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.45	4.5	PQL	ug/Kg	J (all detects)
SL-025-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.63	3.9	PQL	ug/Kg	J (all detects)
SL-025-SA5C-SB-9.0-10.0	ACETONE	J	7.1	7.3	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.5	3.7	PQL	ug/Kg	
SL-028-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.87	4.3	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP12-SA5C-QC-120610	ANTHRACENE	J	0.58	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.0	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.6	1.9	PQL	ug/Kg	
	Dimethylphthalate	J	17	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.86	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
SL-018-SA5C-SB-4.0-5.0	BENZO(A)PYRENE	J	0.94	1.9	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.78	1.9	PQL	ug/Kg	
	CHRYSENE	J	0.77	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	0.91	1.9	PQL	ug/Kg	
	PYRENE	J	0.80	1.9	PQL	ug/Kg	
SL-024-SA5C-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.3	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.5	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE029 **Laboratory: LL**

EDD Filename: DE029_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-025-SA5C-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.8	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.9	PQL	ug/Kg	
	PYRENE	J	1.8	1.9	PQL	ug/Kg	
SL-028-SA5C-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.5	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.96	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.75	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	20	PQL	ug/Kg	
	CHRYSENE	J	1.7	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	PYRENE	J	1.7	1.8	PQL	ug/Kg	

Enclosure II

EPA Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: December 6, 2010

LDC Report Date: May 10, 2011

Matrix: Soil/Water

Parameters: Volatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
SL-024-SA5C-SB-4.0-5.0
TB-120610
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 8 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
12/8/10 (00:30)	4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	29 36 28	All soil samples in SDG DE029	J (all detects) UJ (all non-detects)	A
12/8/10 (00:53)	Chlorotrifluoroethene	60	All soil samples in SDG DE029	J (all detects) UJ (all non-detects)	A
12/8/10 (12:04)	4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	40 50 36	All water samples in SDG DE029	J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
12/8/10 (12:25)	Chlorotrifluoroethene Freon 133a	58 27	All water samples in SDG DE029	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
11/23/10	2-Hexanone	28	All soil samples in SDG DE029	J (all detects) UJ (all non-detects)	A
11/10/10	Acetone	40	All water samples in SDG DE029	J (all detects) UJ (all non-detects)	A

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
VBLKB09	12/8/10	Methylene chloride Toluene	0.8 ug/Kg 0.1 ug/Kg	All soil samples in SDG DE029

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
DUP12-SA5C-QC-120610	Methylene chloride	0.53 ug/Kg	4.1U ug/Kg
SL-018-SA5C-SB-4.0-5.0	Methylene chloride	0.47 ug/Kg	4.2U ug/Kg
SL-028-SA5C-SB-4.0-5.0	Methylene chloride	0.87 ug/Kg	4.3U ug/Kg

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-024-SA5C-SB-4.0-5.0	Methylene chloride	0.45 ug/Kg	4.5U ug/Kg
SL-025-SA5C-SB-4.0-5.0	Methylene chloride	0.63 ug/Kg	3.9U ug/Kg
SL-025-SA5C-SB-9.0-10.0	Methylene chloride	1.5 ug/Kg	3.7U ug/Kg

Sample TB-120610 was identified as a trip blank. No volatile contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-028-SA5C-SB-4.0-5.0MS/MSD (SL-028-SA5C-SB-4.0-5.0)	Chlorotrifluoroethene	167 (70-130)	170 (70-130)	-	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCS (All soil samples in SDG DE029)	Chlorotrifluoroethene	140 (22-131)	-	-	J (all detects)	P
LCS/LCSD (All water samples in SDG DE029)	1,2-Dibromo-3-chloropropane	-	126 (66-120)	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	DUP12-SA5C-QC-120610	SL-028-SA5C-SB-4.0-5.0			
Acetone	7.4	8.7U	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 TB-120610	4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	Chlorotrifluoroethene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE029	TB-120610	Chlorotrifluoroethene Freon 133a	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	2-Hexanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE029	TB-120610	Acetone	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE029	SL-028-SA5C-SB-4.0-5.0	Chlorotrifluoroethene	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)(Q)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	Chlorotrifluoroethene	J (all detects)	P	Laboratory control samples (%R) (L)
DE029	TB-120610	1,2-Dibromo-3-chloropropane	J (all detects)	P	Laboratory control samples (%R) (L)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 TB-120610 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	DUP12-SA5C-QC-120610 SL-028-SA5C-SB-4.0-5.0	Acetone	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE029

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE029	DUP12-SA5C-QC-120610	Methylene chloride	4.1U ug/Kg	A	B
DE029	SL-018-SA5C-SB-4.0-5.0	Methylene chloride	4.2U ug/Kg	A	B
DE029	SL-028-SA5C-SB-4.0-5.0	Methylene chloride	4.3U ug/Kg	A	B
DE029	SL-024-SA5C-SB-4.0-5.0	Methylene chloride	4.5U ug/Kg	A	B
DE029	SL-025-SA5C-SB-4.0-5.0	Methylene chloride	3.9U ug/Kg	A	B
DE029	SL-025-SA5C-SB-9.0-10.0	Methylene chloride	3.7U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C1a **VALIDATION COMPLETENESS WORKSHEET** Date: 5/9/11
SDG #: DE029 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30, r^2
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples SW	SW	LCS/LCSD
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D= 1,3
XVII.	Field blanks	ND	TB = 5

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil + water

1	DUP12-SA5C-QC-120610	T1	VBLKB09	21		31	
2	SL-018-SA5C-SB-4.0-5.0	T2	VBLKY29	22		32	
3	SL-028-SA5C-SB-4.0-5.0	13		23		33	
4	SL-024-SA5C-SB-4.0-5.0	14		24		34	
5	TB-120610 W	15	—	25		35	
6	SL-025-SA5C-SB-4.0-5.0	16		26		36	
7	SL-025-SA5C-SB-9.0-10.0	17		27		37	
8	SL-028-SA5C-SB-4.0-5.0MS	18		28		38	
9	SL-028-SA5C-SB-4.0-5.0MSD	19		29		39	
10		20		30		40	

LDC #: 25337C/a

VALIDATION FINDINGS CHECKLIST

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 53370|a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation and CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field Blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 25337C/a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	11/23/10	ICV	Z	28		all soils	J/UJ/A (C)
	11/10/10	ICV	F	40		all waters	J/UJ/A (C)
	12/08/10 0030	CCV	Y	29		all soils	↓
			Z	36			
			MM	28			
	12/08/10 0053	CCV	chlorotrifluoroethene	60		all soils	↓
	12/8/10 12:04	CCV	Y	40		all waters	↓
			Z	50		↓	
			MM	36		↓	↓
	12/8/10 12:25	CCV	chlorotrifluoroethene	58		↓	↓
			Freon 133a	27			

LDC #: 25337c/c

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y/N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 12/8/10
Conc. units: ug/kg
Associated Samples: All soils

Compound	Blank ID	Sample Identification								
	VBLK309	1	2	3	4	6	7			
E	0.8	0.53/4.1U	0.47/4.2U	0.87/4.3U	0.45/4.5U	0.63/3.9U	1.5/3.7U			
CC	0.1	-	-	-	-	-				
CROI										

Blank analysis date:
Conc. units:
Associated Samples:

Compound	Blank ID	Sample Identification								
CROI										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 25337C/e

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer:

METHOD : GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	8+9	*	167 (~~22-157~~)	170 (~~23-134~~)	( )	3	J/A det (Q)
			(70-130)	(70-130)	( )		
			( )	( )	( )		
			( )	( )	( )		
		* chlorotrifluoroethene(	)	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
H.	1,1-Dichloroethene	59-172%	≤ 22%	61-145%	≤ 14%
S.	Trichloroethene	62-137%	≤ 24%	71-120%	≤ 14%
V.	Benzene	66-142%	≤ 21%	76-127%	≤ 11%
CC.	Toluene	59-139%	≤ 21%	76-125%	≤ 13%
DD.	Chlorobenzene	60-133%	≤ 21%	75-130%	≤ 13%

LDC #: 25337C/a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT
2nd Reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		LCS	*	140 (22-131)	( )	( )	All soils	J/Pdet (L)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		LCS/D	MM	( )	126 (66-120)	( )	All HW	J det/P (L)
				( )	( )	( )		
				( )	( )	( )		
		* chlorotrifluoroethene		( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 25337C/a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: F2
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

(Y) N N/A Were field duplicate pairs identified in this SDG?
(Y) N N/A Were target compounds detected in the field duplicate pairs?

(FD)

Compound	Concentration (ng/kg)		≤ 50 RPD	
	1	3		
F	7.4 ~~6.9~~	~~234~~ 8.7 U	200	J/UJ/A
E	0.53 ~~0.53~~	0.87	49	-

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 25337e/a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/23/10	C (1st internal standard)	0.3865	0.3865	0.3806	0.3806	4	4
			CC (2nd internal standard)	0.7997	0.7997	0.8561	0.8561	9	9
			JJJ (3rd internal standard)	1.3628	1.3628	1.4115	1.4115	9	9
			(4th internal standard)						
2	ICAL	11/10/10	C (1st internal standard)	0.4983	0.4983	0.5095	0.5095	2	2
			CC (2nd internal standard)	0.9808	0.9808	0.9925	0.9925	5	5
			JJJ (3rd internal standard)	1.5950	1.5950	1.5784	1.5784	7	7
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv	12/08/10	C (1st internal standard)	0.3806	0.3486	0.3486	8	8
			CC (2nd internal standard)	0.8561	0.8100	0.8100	5	5
			JJJ (3rd internal standard)	1.4115	1.1995	1.1995	15	15
			(4th internal standard)					
2			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: AO

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	51.508	103	103	0
1,2-Dichloroethane-d4	↓	50.078	100	100	↓
Toluene-d8		48.462	97	97	
Bromofluorobenzene	↓	45.547	91	91	↓

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 25337 c/c

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = | MSC - MSC | * 2/(MSC + MSDC)

MSC = Matrix spike concentration; MSDC = Matrix spike duplicate concentration

MS/MSD sample: 8 + 9

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-----	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	20	~~20~~ 21.3	ND	23.5	25.1	117	117	118	118	1	1
Trichloroethene	↓	↓	↓	21.7	23.1	108	108	109	109	1	1
Benzene				22.5	23.8	112	112	112	112	0	0
Toluene				22.0	23.3	110	110	109	109	1	1
Chlorobenzene				21.1	22.2	105	105	104	104	1	1

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337c/9

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: LCS 8011

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	20.0	NA	20.27	NA	101	101				
Trichloroethene	↓		20.09	↓	100	100				
Benzene		↓	20.76		104	104				
Toluene			19.84		99	99				
Chlorobenzene	↓	↓	19.40	↓	97	97	NA			

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C/S

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, F:

Conc. = $\frac{(10281)(50)(5)}{(985061)(0.0723)(5.54)(0.879)}$

=

= 7.4 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 6, 2010
LDC Report Date:	May 10, 2011
Matrix:	Soil/Water
Parameters:	1,4-Dioxane
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
SL-024-SA5C-SB-4.0-5.0
TB-120610
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 8 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B using Selected Ion Monitoring (SIM) for 1,4-Dioxane.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0%.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 25.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% .

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks.

Sample TB-120610 was identified as a trip blank. No 1,4-dioxane was found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

Santa Susana Field Laboratory
1,4-Dioxane - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 TB-120610 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C1b **VALIDATION COMPLETENESS WORKSHEET** Date: 5/9/11
SDG #: DE029 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: F
2nd Reviewer:

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	~~SW~~ A	
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 1, 3
XVII.	Field blanks	ND	TB = 5

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil + water

1	DUP12-SA5C-QC-120610	11	YBLKE60	21		31	
2	SL-018-SA5C-SB-4.0-5.0	12	YBLKE59	22		32	
3	SL-028-SA5C-SB-4.0-5.0	13		23		33	
4	SL-024-SA5C-SB-4.0-5.0	14		24		34	
5	TB-120610 W	15		25		35	
6	SL-025-SA5C-SB-4.0-5.0	16		26		36	
7	SL-025-SA5C-SB-9.0-10.0	17		27		37	
8	SL-028-SA5C-SB-4.0-5.0MS	18		28		38	
9	SL-028-SA5C-SB-4.0-5.0MSD	19		29		39	
10		20		30		40	

LDC #: 25337c1b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: a

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?			✓	
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $\geq$ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) $\leq$ 25% and relative response factors (RRF) $\geq$ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicate				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25337c1b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X Required Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
X Target Compounds				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	NA		✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
X Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
X Tentatively Identified Compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
X System Performance				
System performance was found to be acceptable.	✓			
X Overall Assessment				
Overall assessment of data was found to be acceptable.	✓			
X Field Duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
X Field Blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 25337c1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (5 std)	Recalculated RRF (5 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/7/10	1,4-Dioxane (1st internal standard)	1.3539	1.3539	1.3396	1.3396	2	2
			(2nd internal standard)						
			(3rd internal standard)	(10)	(10)				
	ICAL	11/01/10	↓ (4th internal standard)	1.3359	1.3359	1.3219	1.3219	1	1
2			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337c1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv	12/9/10	1,4-Dioxane (1st internal standard)	1.3396	1.3538	1.3538	1	1
			(2nd internal standard)					
	ccv	12/9/10	(3rd internal standard)					
	5:26		↓ (4th internal standard)	1.3219	1.3919	1.3919	5	5
2			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C1b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
~~Dibromofluoromethane~~					
~~1,2-Dichloroethane-d4~~					
Toluene-d8	10	9.76	98	98	0
~~Bromofluorobenzene~~					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 25337c1b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration; MSDC = Matrix spike duplicate concentration

MS/MSD sample: 8 + 9

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	----	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,4-Dioxane	263.0	220.0	ND	115	100	44	44	46	46	4	4
~~1,1-Dichloroethene~~											
Trichloroethene											
Benzene											
Toluene											
~~Chlorobenzene~~											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C1b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: LCS/D 801 1

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene										
Trichloroethene										
Benzene										
Toluene										
Chlorobenzene										
1,4-Dioxane	125.0	125.0	139.44	133.78	112	112	107	107	4	4

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 55337C1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. _____, _____:

Conc. = ( ) ( ) ( ) / ( ) ( ) ( ) ( )

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 6, 2010
LDC Report Date:	May 10, 2011
Matrix:	Soil
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
SL-024-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-024-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semilvolatile contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-028-SA5C-SB-4.0-5.0MS/MSD (SL-028-SA5C-SB-4.0-5.0)	Benzidine	30 (35-141)	-	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No semivolatiles were detected in any of the samples.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	SL-028-SA5C-SB-4.0-5.0	Benzidine	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C2a **VALIDATION COMPLETENESS WORKSHEET** Date: 5/9/11
SDG #: DE029 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: F
2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 1, 3
XVII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

SOIL

1	DUP12-SA5C-QC-120610	11	SDLK LA344	21		31	
2	SL-018-SA5C-SB-4.0-5.0	12		22		32	
3	SL-028-SA5C-SB-4.0-5.0	13		23		33	
4	SL-024-SA5C-SB-4.0-5.0	14		24		34	
5	SL-025-SA5C-SB-4.0-5.0	15		25		35	
6	SL-025-SA5C-SB-9.0-10.0	16		26		36	
7	SL-024-SA5C-SB-9.0-10.0	17		27		37	
8	SL-028-SA5C-SB-4.0-5.0MS	18		28		38	
9	SL-028-SA5C-SB-4.0-5.0MSD	19		29		39	
10		20		30		40	

LDC #: 25337C29

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
Was an LCS analyzed for this SDG?	✓			

LDC #: 25337C2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
System performance was found to be acceptable.	✓			
Overall assessment of data was found to be acceptable.	✓			
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 25337c29

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		8+9	SSS	30 (35-141)	( )	( )	3	J/UJ/A Q
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )	

LDC #: 25337C2a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
$\%RSD = 100 * (S/X)$

A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard
S = Standard deviation of the RRFs, X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	1001L	12/2/10	Phenol (1st internal standard)	2.649	2.649	2.738	2.738	5	5
			~~Naphthalene~~ Nitrobenzene (2nd internal standard)	0.469	0.469	0.474	0.474	2	2
			~~Fluorene~~ 2. nitroaniline (3rd internal standard)	0.409	0.409	0.414	0.414	2	2
			Pentachlorophenol (4th internal standard)	0.145	0.145	0.139	0.139	5	5
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.859	0.859	0.835	0.835	4	4
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)	1.560	1.560	1.477	1.477	5	5
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C29

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	e1947	12/13/10	Phenol (1st internal standard)	2.738	2.869	2.869	5	5
			~~Naphthalene~~ nitrobenzene (2nd internal standard)	0.474	0.485	0.485	2	2
			~~Fluorene~~ 2-nitroaniline (3rd internal standard)	0.414	0.411	0.411	1	1
			Pentachlorophenol (4th internal standard)	0.139	0.132	0.132	5	5
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.835	0.846	0.846	1	1
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)	1.477	1.731	1.731	17	17
2	e1050	12/14/10	Phenol (1st internal standard)		2.907	2.907	6	6
			~~Naphthalene~~ nitrobenzene (2nd internal standard)		0.472	0.472	0	0
			~~Fluorene~~ 2-nitroaniline (3rd internal standard)		0.419	0.419	1	1
			Pentachlorophenol (4th internal standard)		0.127	0.127	8	8
			Bis(2-ethylhexyl)phthalate (5th internal standard)		0.823	0.823	1	1
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)		1.584	1.584	7	7
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C2a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: 2

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	80.849	81	81	0
2-Fluorobiphenyl	↓	90.510	91	91	↓
Terphenyl-d14	↓	89.368	89	89	
Phenol-d5	200	176.826	88	88	
2-Fluorophenol	↓	172.70	86	86	
2,4,6-Tribromophenol	↓	155.765	78	78	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 25337c29

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 8 + 9

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1666.67	1666.67	ND	1566.76	1680.63	94	94	101	101	7	7
N-Nitroso-di-n-propylamine				1492.48	1623.17	90	90	97	97	7	7
4-Chloro-3-methylphenol				1607.53	1689.86	96	96	101	101	5	5
Acenaphthene				1619.16	1682.10	97	97	101	101	4	4
Pentachlorophenol				1035.02	1152.25	62	62	69	69	11	11
Pyrene				1766.88	1806.01	106	106	108	108	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C2s

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS

Compound	Spike Added (ng/kg)		Spike Concentration (ng/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1666.67	NA	1548.69	NA	93	93				
N-Nitroso-di-n-propylamine			1498.11		90	90				
4-Chloro-3-methylphenol			1634.71		98	98				
Acenaphthene										
Pentachlorophenol			1236.32	NA	74	74				
Pyrene							NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C29

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: [signature]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. _____ , _____:

Conc. = $\frac{(\quad)(\quad)(\quad)(\quad)(\quad)}{(\quad)(\quad)(\quad)(\quad)(\quad)(\quad)}$

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: December 6, 2010

LDC Report Date: May 10, 2011

Matrix: Soil

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
SL-024-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-024-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semilvolatile contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-028-SA5C-SB-4.0-5.0MS/MSD (SL-028-SA5C-SB-4.0-5.0)	Dimethylphthalate Benzo(g,h,i)perylene	- -	119 (74-118)	- 34 (≤30)	J (all detects) J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	DUP12-SA5C-QC-120610	SL-028-SA5C-SB-4.0-5.0			
Bis(2-ethylhexyl)phthalate	6.8U	10	200 (≤50)	J (all detects) UJ (all non-detects)	A
Dimethylphthalate	17	20U	200 (≤50)	J (all detects) UJ (all non-detects)	A
Anthracene	0.58	1.8U	200 (≤50)	J (all detects) UJ (all non-detects)	A
Benzo(a)anthracene	2.8	1.1	87 (≤50)	J (all detects)	A
Benzo(a)pyrene	2.0	1.5	29 (≤50)	-	-
Benzo(b)fluoranthene	4.3	2.6	49 (≤50)	-	-
Benzo(g,h,i)perylene	1.0	0.96	4 (≤50)	-	-
Benzo(k)fluoranthene	1.6	0.75	72 (≤50)	J (all detects)	A
Chrysene	3.6	1.7	72 (≤50)	J (all detects)	A
Fluoranthene	6.7	1.7	119 (≤50)	J (all detects)	A
Indeno(1,2,3-cd)pyrene	0.86	1.8U	200 (≤50)	J (all detects) UJ (all non-detects)	A
Naphthalene	1.4	1.8U	200 (≤50)	J (all detects) UJ (all non-detects)	A
Phenanthrene	7.0	1.8U	200 (≤50)	J (all detects) UJ (all non-detects)	A
Pyrene	5.6	1.7	107 (≤50)	J (all detects)	A

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	SL-028-SA5C-SB-4.0-5.0	Dimethylphthalate	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE029	SL-028-SA5C-SB-4.0-5.0	Benzo(g,h,i)perylene	J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE029	DUP12-SA5C-QC-120610 SL-028-SA5C-SB-4.0-5.0	Bis (2-Ethylhexyl) phthalate Dimethylphthalate Anthracene Indeno(1,2,3-cd)pyrene Naphthalene Phenanthrene	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)
DE029	DUP12-SA5C-QC-120610 SL-028-SA5C-SB-4.0-5.0	Benzo(a)anthracene Benzo(k)fluoranthene Chrysene Fluoranthene Pyrene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C2b **VALIDATION COMPLETENESS WORKSHEET** Date: 5/9/11

SDG #: DE029 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: TP

SVOA 2nd Reviewer: A

METHOD: GC/MS ~~Polynuclear Aromatic Hydrocarbons~~ (EPA SW 846 Method 8270C-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 1,3
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

SOIL

1	DUP12-SA5C-QC-120610	11	SBLKLB344	21		31	
2	SL-018-SA5C-SB-4.0-5.0	12		22		32	
3	SL-028-SA5C-SB-4.0-5.0	13		23		33	
4	SL-024-SA5C-SB-4.0-5.0	14		24		34	
5	SL-025-SA5C-SB-4.0-5.0	15		25		35	
6	SL-025-SA5C-SB-9.0-10.0	16		26		36	
7	SL-024-SA5C-SB-9.0-10.0	17		27		37	
8	SL-028-SA5C-SB-4.0-5.0MS	18		28		38	
9	SL-028-SA5C-SB-4.0-5.0MSD	19		29		39	
10		20		30		40	

LDC #: 25337c2b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
Was an LCS analyzed for this SDG?	✓			

LDC #: 25337c2h

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: 1

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
System performance was found to be acceptable.	✓			
Overall assessment of data was found to be acceptable.	✓			
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 25337c2b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: A

METHOD : GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	8+9	CC	( )	119 (74-118)	( )	3	J/A dil (a)
		LLL	( )	( )	34 (30)	↓	↓ ↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
H.	1,1-Dichloroethene	59-172%	≤ 22%	61-145%	≤ 14%
S.	Trichloroethene	62-137%	≤ 24%	71-120%	≤ 14%
V.	Benzene	66-142%	≤ 21%	76-127%	≤ 11%
CC.	Toluene	59-139%	≤ 21%	76-125%	≤ 13%
DD.	Chlorobenzene	60-133%	≤ 21%	75-130%	≤ 13%

LDC#: 25337C2b **VALIDATION FINDINGS WORKSHEET**

Field Duplicates

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS SVOA (EPA SW 846 Method 8270D-SIM)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

(FD)

Compound	Concentration (ug/kg)		≤50 RPD	
	1	3		
Bis (2-Ethylhexyl) phthalate	6.8U	10	200	J/UJ/A
Dimethylphthalate	17	~~6.6U~~ 20U	200	↓
Anthracene	0.58	~~0.37U~~ 1.8U	200	↓
Benzo(a)anthracene	2.8	1.1	87	J/A dit
Benzo(a)pyrene	2.0	1.5	29	–
Benzo(b)fluoranthene	4.3	2.6	49	–
Benzo(g,h,i)perylene	1.0	0.96	4	–
Benzo(k)fluoranthene	1.6	0.75	72	J/A dit
Chrysene	3.6	1.7	72	↓
Fluoranthene	6.7	1.7	119	↓
Indeno(1,2,3-cd)pyrene	0.86	~~0.74U~~ 1.8U	200	J/UJ/A
Naphthalene	1.4	~~0.74U~~ 1.8U	200	↓
Phenanthrene	7.0	~~0.74U~~ 1.8U	200	↓
Pyrene	5.6	1.7	107	J/A dit

V:\FIELD DUPLICATES\templates\25337C2b.wpd

LDC #: 25337c2b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF ((1) std)	Recalculated RRF ( ) std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/8/10	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	1.092	1.092	1.138	1.138	7	7
			Fluorene (3rd internal standard)	1.340	1.340	1.371	1.371	8	8
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.163	1.163	1.183	1.183	9	9
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.220	1.220	1.252	1.252	6	6
			Benzo(a)pyrene (6th internal standard)	1.240	1.240	1.266	1.266	8	8
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 337c26

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [signature]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv	12/11/10	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)	1.138	1.052	1.052	8	8
			Fluorene (3rd internal standard)	1.371	1.276	1.276	7	7
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.183	1.074	1.074	9	9
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.252	1.158	1.158	8	8
			Benzo(a)pyrene (6th internal standard)	1.264	1.174	1.174	7	7
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337c2b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.0	0.923	92	92	0
2-Fluorobiphenyl	↓	0.830	83	83	↓
Terphenyl-d14		0.821	82	82	
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 25337226

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 8 + 9

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	33.33	33.33	ND	29.35	31.45	88	88	94	94	6	6
Pentachlorophenol											
Pyrene	↓	↓	1.52	29.59	32.25	84	84	92	92	9	9

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337c2b

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	30.63	NA	92	92				
Pentachlorophenol										
Pyrene	↓	↓	29.82	↓	89	89	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C2b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: [signature]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, S:

Conc. = ~~(21399)~~ 29417 (1)(1000)( )( )
~~502367~~ 431157 (~~0.879~~ 1.266)(30)(0.879)( )
=

2.044 ng/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 6, 2010
LDC Report Date:	May 10, 2011
Matrix:	Soil
Parameters:	N-Nitrosodimethylamine
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1625C for N-Nitrosodimethylamine.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required for by this method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% .

The percent difference (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No N-nitrosodimethylamine was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No N-nitrosodimethylamine was detected in any of the samples with the following exceptions:

Compound	Concentration (ng/Kg)		RPD (Limits)	Flags	A or P
	DUP12-SA5C-QC-120610	SL-028-SA5C-SB-4.0-5.0			
N-nitrosodimethylamine	168	51.2	107 (≤50)	J (all detects)	A

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE029	DUP12-SA5C-QC-120610 SL-028-SA5C-SB-4.0-5.0	N-Nitrosodimethylamine	J (all detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C2c **VALIDATION COMPLETENESS WORKSHEET** Date: 5/6/11
SDG #: DE029 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS N-Nitrosodimethylamine (EPA Method 1625C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II.	GC/MS Instrument performance check	N	Not Required
III.	Initial calibration	A	%RSD ≤ 30
IV.	Continuing calibration/ICV	A	ICV ≤ 30 CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 1,3
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

Soil

93	1 †	DUP12-SA5C-QC-120610 D	11	SBLKLF3451	21		31	
94	2 †	SL-018-SA5C-SB-4.0-5.0	12		22		32	
95	3 †	SL-028-SA5C-SB-4.0-5.0 D	13		23		33	
201	4 †	SL-025-SA5C-SB-4.0-5.0	14		24		34	
202	5 †	SL-025-SA5C-SB-9.0-10.0	15		25		35	
96	6	SL-028-SA5C-SB-4.0-5.0MS	16		26		36	
97	7	SL-028-SA5C-SB-4.0-5.0MSD	17		27		37	
	8		18		28		38	
	9		19		29		39	
	10		20		30		40	

LDC #: 25337C2c

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
Were the DFTPP performance results reviewed and found to be within the specified criteria?			✓	
Were all samples analyzed within the 12 hour clock criteria?			✓	
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ ~~25%~~ 20 and relative response factors (RRF) ≥ 0.05?	✓			
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
Were all surrogate %R within QC limits?			✓	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
Was an LCS analyzed for this SDG?	✓			

LDC #: 25337c2c

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
System performance was found to be acceptable.	✓			
Overall assessment of data was found to be acceptable.	✓			
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25337C2C

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

1625C

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

Compound	Concentration (ng/kg)		≤ 50 RPD
	1	3	
N-Nitrosodimethylamine	168	51.2	107 (FD) J/A det

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 25337C2c

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

1625C

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard
S = Standard deviation of the RRFs, X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (25 std)	Recalculated RRF (25 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/21/10	~~Phenol~~ N-Nitrosodimethylamine (1st internal standard)	0.970	0.970	1.112	1.112	11	11
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C2C

1625C

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270C)~~

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	a1470e	12/24/10	NDMA Phenol (1st internal standard)	1.112	0.925	0.925	17	17
			~~Naphthalene (2nd internal standard)~~					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
2	91481	12/24/10	NDMA ~~Phenol~~ (1st internal standard)	1.112	1.01937	1.01937	8.29	8.29
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337c2c

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

1625C

METHOD: ~~GC/MS BNA (EPA SW-846 Method 8270)~~

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 6 + 7

Compound	Spike Added (ng/kg)		Sample Concentration (ng/kg)	Spiked Sample Concentration (ng/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
N. Nitrosodimethylamine ~~Phenol~~	915.75	915.75	50.95	809.40	825.36	83	83	85	85	2	2
~~N-Nitroso-di-n-propylamine~~											
4-Chloro-3-methylphenol											
Acenaphthene											
Pentachlorophenol											
~~Pyrene~~											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337c2c

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

1625C

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS

Compound	Spike Added (ng/kg)		Spike Concentration (ng/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
N-Nitrosodimethylamine	833.33	NA	754.80	NA	91	91	NA			
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C2c

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, ND MA

Conc. = $\frac{(30151)(25)(1000)}{(152650)(1.112)(30)(0.879)}$ =

168 ng/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: December 6, 2010

LDC Report Date: May 10, 2011

Matrix: Soil

Parameters: Polychlorinated Biphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
SL-024-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-024-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
DUP12-SA5C-QC-120610	Aroclor-1254	83.68	J (all detects)	A
SL-025-SA5C-SB-4.0-5.0	Aroclor-1254	86.08	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	DUP12-SA5C-QC-120610	SL-028-SA5C-SB-4.0-5.0			
Aroclor 5460	1.1	7.0	146 (≤50)	J (all detects)	A
Aroclor 1254	0.71	1.1	43 (≤50)	-	-
Aroclor 1260	1.6	1.3	21 (≤50)	-	-
Aroclor 1248	1.9U	0.67	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	DUP12-SA5C-QC-120610 SL-025-SA5C-SB-4.0-5.0	Aroclor-1254	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE029	DUP12-SA5C-QC-120610 SL-028-SA5C-SB-4.0-5.0	Aroclor 5460	J (all detects)	A	Field duplicates (RPD) (FD)
DE029	DUP12-SA5C-QC-120610 SL-028-SA5C-SB-4.0-5.0	Aroclor 1248	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C3b **VALIDATION COMPLETENESS WORKSHEET** Date: 5/9/11

SDG #: DE029 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6 | 10
II.	GC/ECD Instrument Performance Check	NA	
III.	Initial calibration	A	% RSD ≤ 20
IV.	Continuing calibration/ICV	A SW	RY | CCY ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples A	SW	LCS 1(1)
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation and reported CRQLs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	SW	D = 1,3
XVI.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil

1	DUP12-SA5C-QC-120610	11	PBLK16344	21		31	
2	SL-018-SA5C-SB-4.0-5.0	12		22		32	
3	SL-028-SA5C-SB-4.0-5.0	13		23		33	
4	SL-024-SA5C-SB-4.0-5.0	14		24		34	
5	SL-025-SA5C-SB-4.0-5.0	15		25		35	
6	SL-025-SA5C-SB-9.0-10.0	16		26		36	
7	SL-024-SA5C-SB-9.0-10.0	17		27		37	
8	SL-028-SA5C-SB-4.0-5.0MS	18		28		38	
9	SL-028-SA5C-SB-4.0-5.0MSD	19		29		39	
10		20		30		40	

Notes: _____

LDC #: 25337c2b
SDG #: all cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer:

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337C3b
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25337C3b

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD But 2 column Finding ≤ 40	Associated Samples	Qualifications
	AA	83.6%	1	J/A det (* X111)
	AA	86.0%	5	↓

Comments: See sample calculation verification worksheet for recalculations

LDC#: 25337C3b **VALIDATION FINDINGS WORKSHEET**
Field Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC PCB (EPA Method 8082)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs? (FD)

Compound	Concentration (ug/Kg)		≤50 RPD	
	1	3		
Aroclor 5460	1.1	7.0	146	J/A
~~PCB~~ - 1254	0.71	1.1	43	—
PCB - 1260	1.6	1.3	21	—
PCB - 1248	~~0.380~~ 1.94	0.67	~~56~~ 200	J/UJ/A

C:\Documents and Settings\Ftanguilig\My Documents\25337C3b.wpd

LDC #: 33373b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (200 std)	Recalculated CF (200 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/30/10	Aroclor 1260-1 ZBR1	158	158	156	152	7.6	7.6
			ZBR2	299	299	293	293	5.6	5.6
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 75337c3h
SDG #: fw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	8C20334.04	12/14/10	Aroclor 1260 ZBR1	200.0	205.65	205.65	2.8	2.8
			ZBR2	200.0	213.10	213.10	6.6	6.6
2	8C20334.28	12/14/10	↓	↓	196.95	196.95	1.5	1.5
			↓	↓	209.40	209.40	4.7	4.7
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 55 / CSD
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
TCMX	ZB R2	1.04	1.01048	97	97	0
DCB	ZB R1	↓	0.95446	92	92	0

Sample ID: ___

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

LDC #: 25337C8D
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FZ
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added

RPD =(({SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 8 + 9

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
PCB-1260	16.67	16.67	1.3	18	18	91	91	89	89	3	3

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337c35
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: F
2nd Reviewer: 1

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
PCB 1260	16.67	ND	19	NA	115	115	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337c36
SDG #: [illegible] seven

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name Aroclor 1260 U

Concentration = 1.3835 / 0.879

= 1.6 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications
	ZBB2				
	Aroclor 1260-4	4656.860352(2000) / (263)(1000)(60) = 0.590223			
	1260-4 =	0.590223			
	-5 =	0.63292			
	-6 =	2.927474			
	Avg =	1.3835			

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 6, 2010
LDC Report Date:	May 3, 2011
Matrix:	Soil
Parameters:	Metals
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-024-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-024-SA5C-SB-9.0-10.0
SL-018-SA5C-SB-4.0-5.0MS
SL-018-SA5C-SB-4.0-5.0MSD
SL-018-SA5C-SB-4.0-5.0DUP

Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020, and 7000 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Mercury, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Aluminum Calcium Copper Lead Lithium Phosphorus Tin	6.216 mg/Kg 7.058 mg/Kg 0.284 mg/Kg 0.013 mg/Kg 0.497 mg/Kg 0.819 mg/Kg 1.726 mg/Kg	All samples in SDG DE029
ICB/CCB	Beryllium	0.15 ug/L	All samples in SDG DE029
ICB/CCB	Titanium	0.38 ug/L	SL-024-SA5C-SB-4.0-5.0
ICB/CCB	Titanium	0.91 ug/L	SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
DUP12-SA5C-QC-120610	Tin	2.4 mg/Kg	2.4U mg/Kg
SL-018-SA5C-SB-4.0-5.0	Tin	2.4 mg/Kg	2.4U mg/Kg
SL-024-SA5C-SB-4.0-5.0	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-025-SA5C-SB-4.0-5.0	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-025-SA5C-SB-9.0-10.0	Tin	2.4 mg/Kg	2.4U mg/Kg
SL-024-SA5C-SB-9.0-10.0	Tin	2.8 mg/Kg	2.8U mg/Kg

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-014-SA5C-SB-9.0-10.0MS/MSD (All samples in SDG DE029)	Phosphorus	-	-	23 (≤20)	J (all detects) UJ (all non-detects)	A
SL-018-SA5C-SB-4.0-5.0MS/MSD (All samples in SDG DE029)	Antimony	48 (75-125)	41 (75-125)	-	J (all detects) UJ (all non-detects)	A
	Barium	-	-	22 (≤20)		
SL-018-SA5C-SB-4.0-5.0MS/MSD (All samples in SDG DE029)	Arsenic	170 (75-125)	139 (75-125)	-	J (all detects)	A
	Beryllium	128 (75-125)	-	-	J (all detects)	
	Chromium	145 (75-125)	138 (75-125)	-	J (all detects)	
	Copper	126 (75-125)	126 (75-125)	-	J (all detects)	
	Lead	195 (75-125)	135 (75-125)	-	J (all detects)	
	Nickel	138 (75-125)	-	-	J (all detects)	
	Vanadium	197 (75-125)	169 (75-125)	-	J (all detects)	

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
SL-018-SA5C-SB-4.0-5.0DUP (All samples in SDG DE029)	Zinc	27 (≤20)	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-018-SA5C-SB-4.0-5.0	Barium Chromium Cobalt Copper Vanadium	11 (≤10) 20 (≤10) 30 (≤10) 33 (≤10) 22 (≤10)	All samples in SDG DE029	J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE029	All analytes reported below the RL and above the MDL.	J (all detects)	A

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE029

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0	Phosphorus Barium	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (RPD) (E)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0	Arsenic Beryllium Chromium Copper Lead Nickel Vanadium	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0	Zinc	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0	Barium Chromium Cobalt Copper Vanadium	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Metals - Laboratory Blank Data Qualification Summary - SDG DE029

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE029	DUP12-SA5C-QC-120610	Tin	2.4U mg/Kg	A	B
DE029	SL-018-SA5C-SB-4.0-5.0	Tin	2.4U mg/Kg	A	B

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE029	SL-024-SA5C-SB-4.0-5.0	Tin	2.6U mg/Kg	A	B
DE029	SL-025-SA5C-SB-4.0-5.0	Tin	2.8U mg/Kg	A	B
DE029	SL-025-SA5C-SB-9.0-10.0	Tin	2.4U mg/Kg	A	B
DE029	SL-024-SA5C-SB-9.0-10.0	Tin	2.8U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C4 **VALIDATION COMPLETENESS WORKSHEET** Date: 4-29-11
SDG #: DE029 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: OR
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020~~A~~/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	~~A~~ SW	LCS
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	Not utilized
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	N	(parent sample not analyzed for metals)
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil

1	DUP12-SA5C-QC-120610	11		21	PBS	31	
2	SL-018-SA5C-SB-4.0-5.0	12		22		32	
3	SL-024-SA5C-SB-4.0-5.0	13		23		33	
4	SL-025-SA5C-SB-4.0-5.0	14		24		34	
5	SL-025-SA5C-SB-9.0-10.0	15		25		35	
6	SL-024-SA5C-SB-9.0-10.0	16		26		36	
7	(~~MZ~~) MS	17		27		37	
8	↓ MSD	18		28		38	
9	↓ DUP	19		29		39	
10		20		30		40	

Notes: _____

LDC #: 25331C4

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: CR
2nd Reviewer: W

Method: Metals (EPA SW 846 Method 6010B/7000/6020)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were ≤ 5X the RL.		✓		
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			✓	
Do all applicable analysies have duplicate injections? (Level IV only)			✓	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?		✓		
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.		✓		
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?	✓			
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓	✓	
Target analytes were detected in the field blanks.			✓	

LDC #: 25337C4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer:

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
16		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
QC		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr

LDC #: 25337C4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6020/7000) Soil preparation factor applied: 100x (MS: 2xdil)
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

Reason: B

				Sample Identification										
Analyte	Maximum PB[a] (mg/Kg)	Maximum ICB/CCB[a] (ug/L)	Blank Action Limit	1	2	3	4	5	6					
Al	6.216		31.08											
Be		0.15	0.15											
Ca	7.058		35.29											
Cu	0.284		1.42											
Pb	0.013		0.065											
Li	0.497		2.485											
P	0.819		4.095											
Sn	1.726		8.63	2.4	2.4	2.6	2.8	2.4	2.8					

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 3

				Sample Identification										
Analyte	Maximum PB[a] (mg/Kg)	Maximum ICB/CCB[a] (ug/L)	Blank Action Limit	No Qualifiers (>5x)										
Ti		0.38	0.19											

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 4-6

				Sample Identification										
Analyte	Maximum PB[a] (mg/Kg)	Maximum ICB/CCB[a] (ug/L)	Blank Action Limit	No Qualifiers (>5x)										
Ti		0.91	0.455											

LDC #: 25337C4

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were ICP interference check samples performed as required?

(Y) N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Finding	Associated Samples	Qualifications
	12/12/10	ICSA (16:08)	Mn	4 (≤0.78)	1,3,4	No Qual (<10x)
	12/12/10	ICSA (18:06)	Mn	4 (≤0.78)	↓	↓

Comments: _____

LDC #: 25331C4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: CR
2nd Reviewer:

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	SL-014-SA5C-SB-9.0-10.0		P			23 (≤20)	All	J/UJ/A (E)
	(SDG: DE030)							
	7/8		Sb	48	41		All	J/UJ/A (Q)
			As	170	139			J det/A
			Ba			22		J/UJ/A (E)
			Be	128				J det/A (Q)
			Cr	145	138			
			Cu	126	126			
			Pb	195	135			
			Ni	138				
			V	197	169			

Comments:

LDC #: 25335IC4

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a duplicate sample analyzed for each matrix in this SDG?
Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤ 35% for soil samples? If no, see qualifications below. A control limit of ±R.L. (±2X R.L. for soil) was used for sample values that were <5X the R.L., including the case when only one of the duplicate sample values was <5X R.L.. If field blanks were used for laboratory duplicates, note in the Overall Assessment.

LEVEL IV ONLY:
Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Duplicate ID	Matrix	Analyte	RPD (Limits)	Difference (Limits)	Associated Samples	Qualifications
		9	S	Zn	27 (≤20)		All	J (J/A (E)

LDC #: 25333IC4

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A If analyte concentrations were > 50X the MDL (ICP) ,or >100X the MDL (ICP/MS), was a serial dilution analyzed?
Y (N) N/A Were ICP serial dilution percent differences (%D) ≤10%?
Y (N) N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Diluted Sample ID	Matrix	Analyte	%D (Limits)	Associated Samples	Qualifications
		2	S	Ba	11	All	J/UJ/A (A)
				Cr	20	↓	↓
				Co	30		
				Cu	33		
				V	22		

Comments:

LDC #: 25337C4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: CS
2nd Reviewer:

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Al	28878.58	30000	96.3	96.3	T
ICV	ICP/MS (Initial calibration)	Sb	51.01	50	102.0	102.0	
ICV	CVAA (Initial calibration)	Hg	2.55	2.5	102.0	102.0	
CCV2	ICP (Continuing calibration)	Mg	25169.66	25000	100.7	100.7	
CCV2	ICP/MS (Continuing calibration)	As	24.69	25	98.8	98.8	
CCV	CVAA (Continuing calibration)	Hg	1.01	1	101.0	101.0	
	GFAA (Initial calibration)						
	GFAA (Continuing calibation)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 2
Reviewer: CR
2nd Reviewer:

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$ Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units) ~~mg/kg~~	True / D / SDR (units) ~~mg/kg~~	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Cd	19.34 ug/L	20 ug/L	96.5	96.5	Y
LCS	Laboratory control sample	Zn	352.4	378.0	93	93	
7	Matrix spike	Cd	(SSR-SR) 1.3541 ~~1.4658 CR~~	1.1179	121	121	
9	Duplicate	V	36.8234	33.683	9	9	
2	ICP serial dilution	As	20.2100	21.7	7	7	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Al were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{(100mL)(169.72453 mg/L)}{0.917(1.00)} = 18509 mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	6	Al	18500	18500	Y
		As	5.7	5.7	
		Ba	66.1	66.1	
		Be	0.69	0.69	
		B	2.1	2.1	
		Cd	0.043	0.043	
		Ca	1190	1190	
		Cr	19.4	19.4	
		Co	3.8	3.8	
		Cu	6.2	6.2	
		Fe	19500	19500	
		Pb	6.2	6.2	
		Li	19.1	19.1	
		Mg	3490	3490	
		Mn	115	115	
		Hg	0.0033	0.0033	
		Mo	0.56	0.56	
		Ni	9.0	9.0	
		P	88.6	88.6	
		K	1750	1750	
		Se	0.049	0.049	
		Ag	0.023	0.023	
		Na	161	161	
		Sr	14.3	14.3	
		Tl	0.35	0.35	
		Sn	2.8	2.8	
		Ti	1090	1090	
		V	40.7	40.7	
		Zn	50.2	50.2	
		Zr	1.0	1.0	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 6, 2010
LDC Report Date:	May 3, 2011
Matrix:	Soil
Parameters:	Wet Chemistry
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
SL-024-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-024-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0DUP

Introduction

This data review covers 9 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 9012B for Cyanide, EPA Method 300.0 for Fluoride and Nitrate as Nitrogen, EPA SW 846 Method 7199 for Hexavalent Chromium, EPA SW 846 Method 9045C for pH, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

No field blanks were identified in this SDG.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-028-SA5C-SB-4.0-5.0MS (SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0)	Fluoride	135 (80-120)	J (all detects)	A
SL-028-SA5C-SB-4.0-5.0MS (SL-028-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0)	Nitrate as N	40 (80-120)	J (all detects) UJ (all non-detects)	A

VI. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
SL-028-SA5C-SB-4.0-5.0DUP (SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0)	Fluoride	-	3.22 mg/Kg (≤2.2)	J (all detects) UJ (all non-detects)	A
SL-028-SA5C-SB-4.0-5.0DUP (SL-028-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0)	Nitrate as N	-	11.2 mg/Kg (≤3.4)	J (all detects) UJ (all non-detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Sample Result Verification

All sample result verifications were acceptable

All analytes reported below the RL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE029	All analytes reported below the RL and above the MDL.	J (all detects)	A

IX. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

X. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration		RPD (Limits)	Flags	A or P
	DUP12-SA5C-QC-120610	SL-028-SA5C-SB-4.0-5.0			
Fluoride	3.9 mg/Kg	0.88U mg/Kg	200 (≤50)	J (all detects) UJ (all non-detects)	A
Nitrate as N	3.6 mg/Kg	15.8 mg/Kg	126 (≤50)	J (all detects)	A

Analyte	Concentration		RPD (Limits)	Flags	A or P
	DUP12-SA5C-QC-120610	SL-028-SA5C-SB-4.0-5.0			
pH	7.19 units	8.00 units	11 (≤50)	-	-

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE029

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE029	SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0	Fluoride	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE029	SL-028-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	Nitrate as N	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE029	SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0	Fluoride	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (Difference) (E)
DE029	SL-028-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	Nitrate as N	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (Difference) (E)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-024-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0 SL-024-SA5C-SB-9.0-10.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)
DE029	DUP12-SA5C-QC-120610 SL-028-SA5C-SB-4.0-5.0	Fluoride	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)
DE029	DUP12-SA5C-QC-120610 SL-028-SA5C-SB-4.0-5.0	Nitrate as N	J (all detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Wet Chemistry - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C6 **VALIDATION COMPLETENESS WORKSHEET** Date: 5-2-11
SDG #: DE029 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CB
2nd Reviewer: V

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate-N, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), ~~Oxidation-Reduction Potential (ASTM D1498)~~, pH (EPA SW846 Method 9045C) Perchlorate (EPA 314.0)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS
V	Duplicates	SW	DUP
VI.	Laboratory control samples	A	LCS/D
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	SW	(1,3)
X.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	DUP12-SA5C-QC-120610	11		21	(MB)	31	
2	SL-018-SA5C-SB-4.0-5.0	12		22		32	
3	SL-028-SA5C-SB-4.0-5.0	13		23		33	
4	SL-024-SA5C-SB-4.0-5.0	14		24		34	
5	SL-025-SA5C-SB-4.0-5.0	15		25		35	
6	SL-025-SA5C-SB-9.0-10.0	16		26		36	
7	SL-024-SA5C-SB-9.0-10.0	17		27		37	
8	SL-028-SA5C-SB-4.0-5.0MS	18		28		38	
9	SL-028-SA5C-SB-4.0-5.0DUP	19		29		39	
10		20		30		40	

Notes:

LDC #: 25576

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: QC
2nd Reviewer:

Method: Inorganics (EPA Method See Cover)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	✓			
Were titrant checks performed as required? (Level IV only)			✓	
Were balance checks performed as required? (Level IV only)			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were ≤ 5X the CRDL.		✓		
V. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	✓			
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

Validation Area	Yes	No	NA	Findings/Comments
VII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were detection limits < RL?	✓			
VIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
IX. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target analytes were detected in the field duplicates.	✓			
X. Field blanks				
Field blanks were identified in this SDG.		✓		
Target analytes were detected in the field blanks.			✓	

LDC #: 25337C6

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: CC
2nd reviewer: LW

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-3,5,6		(pH) TDS Cl (F) (NO3) NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC (CR6+) (ClO4)
4,7		(pH) TDS Cl (F) NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC (CR6+) (ClO4)
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
QC:8		pH TDS Cl (F) (NO3) NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC (CR6+) (ClO4)
9		pH TDS Cl (F) (NO3) NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC (CR6+) (ClO4)
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4

Comments: _____

LDC #: 25337C6

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method see cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of ~~75-125~~ 80-120 (85-115% for Method 300.0)? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Matrix Spike ID	Matrix	Analyte	%R	Associated Samples	Qualifications
		8	S	F	135	~~All~~ 3-7	Jdet/A (a)
				NO_3-N	40	~~All~~ 3,5,6	J UJ/A

Comments:

LDC #: 25337C6

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Reviewer: CR
2nd Reviewer:

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a duplicate sample analyzed for each matrix in this SDG?

Y (N) N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water and ≤ 35% for soil samples (≤ 10% for Method 300.0)? If no, see qualification below. A control limit of ±CRDL (±2X CRDL for soil) was used for samples that were ≤5X the CRDL, including when only one of the duplicate sample values were ≤5X the CRDL. If field blanks were used for laboratory duplicates, see overall assessment.

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Duplicate ID	Matrix	Analyte	Difference RPD (Limits)	Associated Samples ✓	Qualifications
		9	S	F	3.22 (≤2.2)	~~All~~ 3-4	J/UJ/A (E)
				NO_3-N	11.2 (≤3.4)	~~1-3, 5-16~~	↓ ↓

Comments:

LDC# 25337C6

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

Inorganics, Method See Cover

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/Kg) 1	Concentration (mg/Kg) 3	RPD (≤50)	Qualifications: (Parents Only)
Fluoride	3.9	0.88U	~~126~~ 200	J/UJ/A (~~J~~)
Nitrate as N	3.6	15.8	126	Jdet/A (~~J~~)
pH (no units)	7.19	8.00	11	

V:\FIELD DUPLICATES\FD_inorganic\25337C6.wpd

lody (~~FD~~)

LDC #: 25337C6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Reviewer: AR
2nd Reviewer: [illegible]

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of ClO4 was recalculated. Calibration date: 12/6/10

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution

True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (mg/l)	Response	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	ClO4	s1	2	0.003	*1.000*	0.999	Y
		s2	4.00	0.01			
		s3	10.00	0.024			
		s4	25.00	0.063			
		s5	100.00	0.263			
Calibration verification	CN	CCV	0.15	0.14210	95	95	
Calibration verification	NO_3N		1.5	1.513089	101	—	
Calibration verification	F		↓	1.508695	101	—	↓

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 53376

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: QR
2nd Reviewer:

METHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / D (units)	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	ClO_4	473	500	95	-	Y
8	Matrix spike sample	Cr6+	(SSR-SR) 37.3	40	93	93	
9	Duplicate sample	NO_3-N	14.3	3.1	129	130	✓

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 2533106

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: [illegible]

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments?
Y N N/A Are all detection limits below the CRQL?

Compound (analyte) results for NO_3-N reported with a positive detect were recalculated and verified using the following equation:

Concentration =

$y = 0.3468x - 0.0049$

Recalculation:

$$\frac{\frac{(0.493+0.0049)}{0.3468} \times 50mL}{(0.906)(5.01g)} = 15.8 \text{ mg/kg}$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	3	NO_3-N	15.8	15.8	Y
		pH (nounits)	8.00	8.00	↓

Note:

RECALC.6

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 6, 2010
LDC Report Date:	May 10, 2011
Matrix:	Soil/Water
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
TB-120610
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 7 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-120610 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No total petroleum hydrocarbons as gasoline were detected in any of the samples.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 TB-120610 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C7 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/6/11
SDG #: DE029 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: FT
2nd Reviewer:

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II	Initial calibration	A	%RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS ID
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 1, 3
XIII.	Field blanks	ND	TB = 4

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil + water

1 1	DUP12-SA5C-QC-120610	11 1	BLK1R	21		31	
2 1	SL-018-SA5C-SB-4.0-5.0	12 2	BLK1P	22		32	
3 1	SL-028-SA5C-SB-4.0-5.0	13		23		33	
4 2	TB-120610 W	14		24		34	
5 1	SL-025-SA5C-SB-4.0-5.0	15		25		35	
6 1	SL-025-SA5C-SB-9.0-10.0	16		26		36	
7 1	SL-028-SA5C-SB-4.0-5.0MS	17		27		37	
8 1	SL-028-SA5C-SB-4.0-5.0MSD	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 53367C7
SDG #: all water

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FD
2nd Reviewer:

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337C7
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓		✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.	✓	NA		
Target compounds were detected in the field blanks.		✓		

LDC #: 25337C7
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC _____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (220std)	Recalculated CF (220std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL DB-624	11/29/10	GRO	35488	35488	37329	37329	12.7	12.7
2	ICAL Restek VRX	8/10/10	GRO	30949	30949	30328	30328	9.0	9.0
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C7
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	12/9/10	GRO	220.00	204.36	204.36	7.1	7.1
	18:43							
2	CCV	12/9/10	GRO	550.00	510.59	510.59	7.2	7.2
	17:42							
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C7
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer:

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TFT	DB 624	653	522.7782	80	80	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25 5 5 1 C/
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FZ
2nd Reviewer: A

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(({SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 7 + 8

Compound	Spike Added (mg/Kg)		Sample Conc. (mg/Kg)	Spike Sample Concentration (mg/Kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	9.26	9.26	ND	6.2	6.9	61	61	68	68	10	10
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C7
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 10

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	11	11	8.6	8.3	78	78	75	75	4	4
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C7
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations	Recalculated Results Concentrations	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 6, 2010
LDC Report Date:	May 10, 2011
Matrix:	Soil
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-028-SA5C-SB-4.0-5.0MS/MSD (SL-028-SA5C-SB-4.0-5.0)	TPH as extractables (C8-C11)	-	0 (49-123)	200 (≤20)	J (all detects) R (all non-detects)	A
	TPH as extractables (C12-C14)	-	0 (49-123)	200 (≤20)	J (all detects) R (all non-detects)	

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-028-SA5C-SB-4.0-5.0MS/MSD (SL-028-SA5C-SB-4.0-5.0)	TPH as extractables (C15-C20)	-	-	21 (≤20)	J (all detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No total petroleum hydrocarbons as extractables were detected in any of the samples with the following exceptions:

Compound	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	DUP12-SA5C-QC-120610	SL-028-SA5C-SB-4.0-5.0			
TPH as extractables (C15-C20)	0.49	1.3U	200 (≤50)	J (all detects) UJ (all non-detects)	A

Compound	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	DUP12-SA5C-QC-120610	SL-028-SA5C-SB-4.0-5.0			
TPH as extractables (C21-C30)	11	8.4	27 (≤50)	-	-
TPH as extractables (C30-C40)	28	21	29 (≤50)	-	-

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	SL-028-SA5C-SB-4.0-5.0	TPH as extractables (C8-C11) TPH as extractables (C12-C14)	J (all detects) R (all non-detects) J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE029	SL-028-SA5C-SB-4.0-5.0	TPH as extractables (C15-C20)	J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE029	DUP12-SA5C-QC-120610 SL-028-SA5C-SB-4.0-5.0	TPH as extractables (C15-C20)	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C8 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/6/11
SDG #: DE029 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II	Initial calibration	A	%RSD ≤20
III.	Calibration verification/ICV	A	ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	SW	D = 1,3
XIII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

SOIL

+ 1	DUP12-SA5C-QC-120610 D	11	PBLK15354	21		31	
+ 2	SL-018-SA5C-SB-4.0-5.0	12		22		32	
+ 3	SL-028-SA5C-SB-4.0-5.0 D	13		23		33	
+ 4	SL-025-SA5C-SB-4.0-5.0	14		24		34	
+ 5	SL-025-SA5C-SB-9.0-10.0	15		25		35	
6	SL-028-SA5C-SB-4.0-5.0MS	16		26		36	
7	SL-028-SA5C-SB-4.0-5.0MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

LDC #: 35337CX
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: A

Method: ✓ GC HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337C8
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: JS337C8

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	6+7	EFH (C8-C11)	( )	0 (49-123)	200 (20)	3	J/R/Δ (Q)
		EFH (C12-C14)	( )	0 (49-123)	200 (20)		↓
		EFH (C15-C20)	( )	( )	21 (20)		J/A dit ↓
		EFH (C21-C30)	-184 (49-123)	507 (49-123)	132 (↓)		*
		EFH (C30-C40)	-449 (49-123)	156 4 (49-123)	151 (↓)		*
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )	* no qual parent 7 4X spike Amt	
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC#: 25337C8 **VALIDATION FINDINGS WORKSHEET**
Field Duplicates

Page: 1 of 1
Reviewer: F2
2nd Reviewer: [illegible]

METHOD: GC TPH as Extractables (Method 8015B)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Compound	Concentration (mg/Kg)		RPD	
	1	3		
EFH (C15-C20)	0.49	1.3J 0.44U	200	J/UJ/A (FD)
EFH (C21-C30)	11	8.4	27	
EFH (C30-C40)	28	21	29	

V:\FIELD DUPLICATES\templates\25337C8.wpd

LDC #: 25337c8
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (2XX std)	Recalculated CF (2XX std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/20/10	C8-C40	14501	14501	15019	15019	44	44
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 337cf
SDG #: fw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	J355.13R	12/21/10	Cx-C40	287.98	278.59	278.59	3.3	3.3
	J355.34R	12/22/10	Cx-C40	575.96	559.34	559.34	2.9	2.9
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25357C8
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
chlorobenzene	NS	1.0	0.531009	~~53~~	53	0
o-terphenyl	↓	↓	0.741961	74	74	0

Sample ID: ___

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

LDC #: 25337c8
SDG #: pw cones

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ
2nd Reviewer:

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 6 + 7

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
EFH (C8-C11)	0.84	0.84	ND	0.52	ND	52	52	0	0	200	200

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337G8
SDG #: all covers

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: FO
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
~~Gasoline~~ EFH (C8-C11) (8015)	0.84	NA	0.66	NA	79	79	NA			
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C8
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name $C_{21} - C_{30}$

Concentration = $\frac{8953546\ (\cancel{60})\ (1000)}{15019\ (60)\ (0.879)(1000)}$

= 11 mg/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 6, 2010
LDC Report Date:	May 10, 2011
Matrix:	Soil
Parameters:	Explosives
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8330A for Explosives.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Column	Compound	%D	Associated Samples	Flag	A or P
12/15/10	Chrompack	HMX	25.9	SL-025-SA5C-SB-9.0-10.0	J (all detects) UJ (all non-detects)	A
12/15/10	Capcell CN	Tetryl	21.8	SL-025-SA5C-SB-9.0-10.0	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No explosive contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No explosives were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	DUP12-SA5C-QC-120610	SL-028-SA5C-SB-4.0-5.0			
1,3-Dinitrobenzene	170U	260	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Explosives - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	SL-025-SA5C-SB-9.0-10.0	HMX Tetryl	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE029	DUP12-SA5C-QC-120610 SL-028-SA5C-SB-4.0-5.0	1,3-Dinitrobenzene	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C40 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/9/11
SDG #: DE029 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: FT
2nd Reviewer: A

METHOD: HPLC Explosives (EPA SW 846 Method 8330A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II	Initial calibration	A	%RSD ≤ 30, r^2
III.	Calibration verification/ICV	SW	
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	SW	D = 1,3
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

SOIL

1	DUP12-SA5C-QC-120610	11	PBLK 05342	21		31	
2	SL-018-SA5C-SB-4.0-5.0	12		22		32	
3	SL-028-SA5C-SB-4.0-5.0	13		23		33	
4	SL-025-SA5C-SB-4.0-5.0	14		24		34	
5	SL-025-SA5C-SB-9.0-10.0	15		25		35	
6	SL-028-SA5C-SB-4.0-5.0MS	16		26		36	
7	SL-028-SA5C-SB-4.0-5.0MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25 337C40
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FJ
2nd Reviewer: C

Method: ____ GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?		✓		
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337C40
SDG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: ____GC ____HPLC

8310	8330	8151	8141	8141 (Con't)	8021B
A. Acenaphthene	A. HMX	A. 2,4-D	A. Dichlorvos	V. Fensulfothion	V. Benzene
B. Acenaphthylene	B. RDX	B. 2,4-DB	B. Mevinphos	W. Bolstar	CC. Toluene
C. Anthracene	C. 1,3,5-Trinitrobenzene	C. 2,4,5-T	C. Demeton-O	X. EPN	EE. Ethyl Benzene
D. Benzo(a)anthracene	D. 1,3-Dinitrobenzene	D. 2,4,5-TP	D. Demeton-S	Y. Azinphos-methyl	SSS. O-Xylene
E. Benzo(a)pyrene	E. Tetryl	E. Dinoseb	E. Ethoprop	Z. Coumaphos	RRR. MP-Xylene
F. Benzo(b)fluoranthene	F. Nitrobenzene	F. Dichlorprop	F. Naled	AA. Parathion	GG. Total Xylene
G. Benzo(g,h,i)perylene	G. 2,4,6-Trinitrotoluene	G. Dicamba	G. Sulfotep	BB. Trichloronate	
H. Benzo(k)fluoranthene	H. 4-Amino-2,6-dinitrotoluene	H. Dalapon	H. Phorate	CC. Trichlorinate	
I. Chrysene	I. 2-Amino-4,6-dinitrotoluene	I. MCPP	I. Dimethoate	DD. Trifluralin	
J. Dibenz(a,h)anthracene	J. 2,4-Dinitrotolune	J. MCPA	J. Diazinon	EE. Def	
K. Fluoranthene	K. 2,6-Dinitrotoluene	K. Pentachlorophenol	K. Disulfoton	FF. Prowl	
L. Fluorene	L. 2-Nitrotoluene	L. 2,4,5-TP (silvex)	L. Parathion-methyl	GG. Ethion	
M. Indeno(1,2,3-cd)pyrene	M. 3-Nitrotoluene	M. Silvex	M. Ronnel	HH. Tetrachlorvinphos	
N. Naphthalene	N. 4-Nitrotoluene		N. Malathion	II. Sulprofos	
O. Phenanthrene	O.		O. Chlorpyrifos		
P. Pyrene	P.		P. Fenthion		
Q.	Q		Q. Parathion-ethyl		
R.			R. Trichloronate		
S.			S. Merphos		
			T. Sulrofos		
			U. Tokuthion		

Notes: _____

LDC #: 25337C40

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ~~GC~~ / HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD

Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤15.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 15.0)	RT (limit)	Associated Samples	Qualifications
	12/15/10	CCV	chrompack	A	25.9	( )	5	J/UJ/A (C)
	6:08		Capcell CN	E	21.8	( )	↓	↓
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 25337c40

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer:

METHOD: ___ GC ✓ HPLC
Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/kg)		%RPD Limit ≤ 50	Qualification Parent only / All Samples
	1	3		
D	~~57U~~ 170U	~~55~~ 260	200	J/UJ/A (FD)

Compound	Concentration ( )		%RPD Limit _____	Qualification Parent only / All Samples

LDC #: 25337c4U
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer: [illegible]

METHOD: GC _____ HPLC ✓

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 499.50 CF (494 std)	Recalculated 499.50 CF (494 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL chrompack	12/13/10	nitrobenzene	1.99×10^2	1.99×10^2	1.95×10^2	1.95×10^2	3.4	3.4
			3-Nitrotoluene	1.22×10^2	1.22×10^2	1.20×10^2	1.20×10^2	2.5	2.5
2	ICAL CAPCELL CN	12/13/10	↓	1.67×10^2	1.67×10^2	1.73×10^2	1.73×10^2	11.5	11.5
				1.96×10^2	1.96×10^2	1.97×10^2	1.97×10^2	4.4	4.4
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C4U
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FJ
2nd Reviewer: a

METHOD: GC_____ HPLC ✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	12/14/10	Nitrobenzene	999.0	965.83	965.83	3.3	3.3
	21:39	chrompack	3-Nitrotoluene	988.0	991.27	991.27	0.3	0.3
2	CCV	12/15/10	↓	499.50	516.19	516.19	3.3	3.3
	6:08	chrompack	↓	494.00	498.15	498.15	0.8	0.8
3	CCV	12/14/10	↓	999.0	943.17	943.17	5.6	5.6
	21:39	Capcell CN	↓					
4		12/15/10	↓	499.50	517.33	517.33	3.6	3.6
	CCV:	~~chrompack~~	↓					
	6:08	Capcell CN						

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337040

SDG #: see cover

METHOD: ___ GC ✓ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: CL

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
2-Nitro-m-xylene	chrompack	~~2997~~ 2500	~~3171.892090~~ 2656.81	106	106	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

LDC #: 3 33 /C4U
SDG #: pre cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FZ
2nd Reviewer: [illegible]

METHOD: __ GC ✓ __ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(({SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 6 + 7

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)	2500.31	2500.31	ND	2700	2800	99	99	101	101	2	2
2,4,6-Trinitrotoluene (8330)	2499	2499		2900	3000	106	106	107	107	1	1

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337c4U
SDG #: all cores

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ___ GC ✓ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: las 15

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)	2500.31	NA	2400	NA	97	97				
2,4,6-Trinitrotoluene (8330)	2499	↓	2700	↓	107	107	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337c4U
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: __ GC / HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #2 Compound Name 1,3-DNB

Concentration = $\frac{13433 \quad (20000)}{277.2329 \quad (4) \quad (0.877)(1000}$

= 280. ug/Kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 6, 2010
LDC Report Date:	May 10, 2011
Matrix:	Soil
Parameters:	Terphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Terphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No terphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-028-SA5C-SB-4.0-5.0MS/MSD (SL-028-SA5C-SB-4.0-5.0)	m-Terphenyl p-Terphenyl	- -	- -	23 (≤20) 21 (≤20)	J (all detects) J (all detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

The QAPP reporting limits (RL) were met with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG DE029	o-Terphenyl m-Terphenyl p-Terphenyl	Laboratory reporting limit reported at 3.5 mg/Kg.	Reporting limit should be reported at 0.167 mg/Kg per the QAPP.	None None None	P

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No terphenyls were detected in any of the samples.

Santa Susana Field Laboratory
Terphenyls - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	SL-028-SA5C-SB-4.0-5.0	m-Terphenyl p-Terphenyl	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	o-Terphenyl m-Terphenyl p-Terphenyl	None None None	P	Compound quantitation and CRQLs (*IX)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C41 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/6/11
SDG #: DE029 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: PI
2nd Reviewer: A

METHOD: GC Terphenyls (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II	Initial calibration	A	%RSD
III.	Calibration verification/ICV	A	ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	SW	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 1,3
XIII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:
SOIL

1	DUP12-SA5C-QC-120610	11	PBLK113206	21		31	
2	SL-018-SA5C-SB-4.0-5.0	12		22		32	
3	SL-028-SA5C-SB-4.0-5.0	13		23		33	
4	SL-025-SA5C-SB-4.0-5.0	14		24		34	
5	SL-025-SA5C-SB-9.0-10.0	15		25		35	
6	SL-028-SA5C-SB-4.0-5.0MS	16		26		36	
7	SL-028-SA5C-SB-4.0-5.0MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25337C4 1
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337C41
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25 33704/

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer:

METHOD: __ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	6 + 7	m-Terphenyl	( )	( )	23 (20)	3	J/A det (Q)
		p-Terphenyl	( )	( )	21 (20)	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25337C1

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	Finding (LAB RL / QA PP RL)	Associated Samples	Qualifications
	o-Terphenyl	3.5 mg/kg / 0.167 mg/kg	All	none / P (E) (*1X)
	m-terphenyl	↓ / ↓	↓	↓ / ↓
	p-Terphenyl	↓ / ↓	↓	↓ / ↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25337C4/

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer: [signature]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

Level 3

#	Standard ID	Calibration Date	Compound	Reported 16.142 CF (std)	Recalculated 16.142 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/10/10	0 - Terphenyl	2.25×10^4	2.25×10^4	2.28×10^4	2.28×10^4	1.7	1.7
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C4/
SDG #: pw Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	12/13/10	o - Terphenyl	32.28	33.45	33.45	3.6	3.6
	R344.34R							
2	R344.45R	12/14/10	↓	↓	34.17	34.17	5.8	5.8
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 33241

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer:

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
n-Triacontane-d62	NS	0.333	0.270369	81	81	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25 037 41
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FZ
2nd Reviewer: [illegible]

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 6 + 7

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
o-Terphenyl	1.67	1.67	ND	1.5	1.8	79	79	98	98	21	21

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C41
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: _____

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
o-Terphenyl	1.67	NA	1.8	NA	105	105	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C41
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: December 6, 2010

LDC Report Date: May 10, 2011

Matrix: Soil

Parameters: Alcohols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Alcohols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No alcohol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No alcohols were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	DUP12-SA5C-QC-120610	SL-028-SA5C-SB-4.0-5.0			
Ethanol	570U	130	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Alcohols - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE029	DUP12-SA5C-QC-120610 SL-028-SA5C-SB-4.0-5.0	Ethanol	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C43 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/6/11

SDG #: DE029 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: FZ

2nd Reviewer: CV

METHOD: GC Alcohols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II	Initial calibration	A	$\bar{x}$, %RSD ≤ 20, r^2
III.	Calibration verification/ICV	A	ICV / CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	SW	D = 1, 3
XIII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: SOIL

1	DUP12-SA5C-QC-120610	11	PBLK101343	21		31	
2	SL-018-SA5C-SB-4.0-5.0	12		22		32	
3	SL-028-SA5C-SB-4.0-5.0	13		23		33	
4	SL-025-SA5C-SB-4.0-5.0	14		24		34	
5	SL-025-SA5C-SB-9.0-10.0	15		25		35	
6	SL-028-SA5C-SB-4.0-5.0MS	16		26		36	
7	SL-028-SA5C-SB-4.0-5.0MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25337C43
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FI
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337C43
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25337C43

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer: A

METHOD: ✓ GC __ HPLC

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/kg)		%RPD Limit ≤50	Qualification Parent only / All Samples
	1	3		
Ethanol	5704 ~~4004~~	130	200	J/UJ/A (FD)

Compound	Concentration ( )		%RPD Limit _____	Qualification Parent only / All Samples

LDC #: 25337C43
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

3

#	Standard ID	Calibration Date	Compound	Reported CF (8000 std)	Recalculated CF (5000 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/8/10	ethanol	2.98	2.98	3.32	3.32	14.6	14.6
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C43
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer:

METHOD: GC / HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	12/9/10	ethanol	10000.00	9778.82	9778.82	2.2	2.2
	11:33							
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C43
SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Acetone	W	2500	2107.85	84	84	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 13 331C47
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FZ
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 6 & 7

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Methanol	2500	2500	NP	2200	2300	90	90	91	91	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337c43
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: VC>

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Methane	2500	NA	2500	NA	102	102	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C43
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #3 Compound Name Ethanol

Concentration = $\frac{778\ (5000)}{3.32\ (10)(0.906)(1000}$

= 130 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 6, 2010
LDC Report Date:	May 10, 2011
Matrix:	Soil
Parameters:	Glycols
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B modified for Glycols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No glycols were detected in any of the samples.

Santa Susana Field Laboratory
Glycols - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C45 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/6/11

SDG #: DE029 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: EZ

2nd Reviewer:

METHOD: GC Glycols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II	Initial calibration	A	%D RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 1,3
XIII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

SOIL

1	DUP12-SA5C-QC-120610	11	PBLK02342	21		31	
2	SL-018-SA5C-SB-4.0-5.0	12		22		32	
3	SL-028-SA5C-SB-4.0-5.0	13		23		33	
4	SL-025-SA5C-SB-4.0-5.0	14		24		34	
5	SL-025-SA5C-SB-9.0-10.0	15		25		35	
6	SL-028-SA5C-SB-4.0-5.0MS	16		26		36	
7	SL-028-SA5C-SB-4.0-5.0MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25337C45
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FR
2nd Reviewer: A

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337C45
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25337C5
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 100.547 CF (std)	Recalculated 100.847 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/9/10	Ethylene Glycol	2699.137	2699.137	2589.384	2589.384	12.77	12.77
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C45
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	E343.14R	12/9/10	Ethylene Glycol	302.70	265.55	265.55	12.3	12.3
2	E343.26R	12/9/10	↓	201.69	192.48	192.48	4.6	4.6
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25533/C85

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene glycol	NS	205	172.2904	84	84	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: A 55/C40
SDG #: pu cones

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FZ
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(({SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 6 + 7

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Ethylene Glycol	199.44	199.44	ND	160	150	78	78	76	76	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C45
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Ethylene glycol	199.4	NA	170	NA	88	88				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337c85
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: December 6, 2010

LDC Report Date: May 10, 2011

Matrix: Soil

Parameters: Formaldehyde

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE029

Sample Identification

DUP12-SA5C-QC-120610
SL-018-SA5C-SB-4.0-5.0
SL-028-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-4.0-5.0
SL-025-SA5C-SB-9.0-10.0
SL-028-SA5C-SB-4.0-5.0MS
SL-028-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8315A for Formaldehyde.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No formaldehyde was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples DUP12-SA5C-QC-120610 and SL-028-SA5C-SB-4.0-5.0 were identified as field duplicates. No formaldehyde was detected in any of the samples.

Santa Susana Field Laboratory
Formaldehyde - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	DUP12-SA5C-QC-120610 SL-018-SA5C-SB-4.0-5.0 SL-028-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-4.0-5.0 SL-025-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C71 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/6/11

SDG #: DE029 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: FO

2nd Reviewer:

METHOD: HPLC Formaldehyde (EPA SW 846 Method 8315A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II	Initial calibration	A	
III.	Calibration verification/ICV	A	
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 1, 3
XIII.	Field blanks	N	

Note: A = Acceptable ND = No compounds detected D = Duplicate
N = Not provided/applicable R = Rinsate TB = Trip blank
SW = See worksheet FB = Field blank EB = Equipment blank

Validated Samples:

Soil

1	DUP12-SA5C-QC-120610	11	PBLK 11343	21		31	
2	SL-016-SA5C-SB-4.0-5.0	12		22		32	
3	SL-028-SA5C-SB-4.0-5.0	13		23		33	
4	SL-025-SA5C-SB-4.0-5.0	14		24		34	
5	SL-025-SA5C-SB-9.0-10.0	15		25		35	
6	SL-028-SA5C-SB-4.0-5.0MS	16		26		36	
7	SL-028-SA5C-SB-4.0-5.0MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25337C1
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FI
2nd Reviewer: 2

Method: ____ GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337C1
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25337C1
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC _____ HPLC ✓

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				2002 CF (std)	2002 CF (std)	Average CF (initial)	Average CF (initial)	%RSD	%RSD
1	ICAL	12/10/10	Formaldehyde	6.21×10^{1}	6.21×10^{1}	6.08×10^{1}	6.08×10^{1}	13.0	13.0
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C1
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer:

METHOD: GC_____HPLC ✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	1F434.20R	12/10/10	Formaldehyde	2002.00	2125.13	2125.13	6.2	6.2
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 2553 / C/
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer:

METHOD: ___ GC ✓ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Butyraldehyde	NS	3980	4618.540527	116	116	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25257C1
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ
2nd Reviewer: A

METHOD: ___ GC ✓ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 6 + 7

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
formaldehyde	5010	5010	ND	5700	5600	104	104	101	101	3	3

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C1
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ___ GC ✓ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Formaldehyde	5010	NA	5200	NA	105	105	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337C1
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ___ GC ✓ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations	Recalculated Results Concentrations	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 6, 2010
LDC Report Date:	May 12, 2011
Matrix:	Soil
Parameters:	Perchlorate
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE029

Sample Identification

SL-025-SA5C-SB-4.0-5.0

Introduction

This data review covers one soil sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6850 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required by the method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the limit of detection verification (LODV) calibration standard were less than or equal to 50.0% for perchlorate.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No perchlorate was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogate spikes were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE029	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Perchlorate - Data Qualification Summary - SDG DE029

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE029	SL-025-SA5C-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Perchlorate - Laboratory Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG DE029

No Sample Data Qualified in this SDG

LDC #: 25337C87 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/6/11

SDG #: DE029 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: LC/MS Perchlorate (EPA SW846 Method 6850)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/6/10
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	r^2
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 15/20 LODV ≤ 50
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

SOIL

1	SL-025-SA5C-SB-4.0-5.0	11	PBLK19342	21		31	
2		12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 05337C87

VALIDATION FINDINGS CHECKLIST

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

LCMS Perchlorate Method 6852

Method: ~~Semivolatiles (EPA SW 846 Method 8270C)~~

Validation Area	Yes	No	NA	Findings/Comments
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?			✓	
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ~~≤ 25%~~ 15 and relative response factors (RRF) ≥ 0.05?	✓			
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
Were all surrogate %R within QC limits?			✓	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
Was an LCS analyzed for this SDG?	✓			

LDC #: 25337C87

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
System performance was found to be acceptable.	✓			
Overall assessment of data was found to be acceptable.	✓			
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC # 25337c87
SDG# see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer:
2nd Reviewer:

METHOD: Method 6850

Parameter: perchlorate

Date	Column	Compound	y	x	
12/10/2010	LCMS	perchlorate	0.03	0.020	
			0.05	0.040	
			0.13	0.100	
			0.25	0.200	
			0.49	0.400	
			1.19	1.000	
			3.01	2.500	

Regression Output:		Regression Output:	Reported	
Constant		0.00649		6.5000E-003
Std Err of Y Est		0.00820		
R Squared		0.99995		0.99999
No. of Observations		7.00000		
Degrees of Freedom		5.00000		
X Coefficient(s)	1.198E+000		0.11980	
Std Err of Coef.	0.003714	0.04		

LDC #: 25337C87

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV	12/10/10	~~Phenol (1st internal standard)~~ Perchlorate	4	3.82	3.82	5	5
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 33708 /

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

6850

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										
Perchlorate	100	NA	96	NA	96	96	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 33787

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: A

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~ 6850

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. _____, _____:

Conc. = $\frac{(\quad)(\quad)(\quad)(\quad)(\quad)}{(\quad)(\quad)(\quad)(\quad)(\quad)}$

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	3050B	6010B	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	3050B	6020	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	3060A	7199	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	3546	1625C	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	3550B	8015B	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	3550B	8015M	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	3550B	8082	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	3550B	8270C	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	3550B	8270C SIM	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	5035	8015M	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	5035	8260B	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	5035	8260B SIM	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	8330	8330A	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	Gen Prep	9045M	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	METHOD	300.0	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	METHOD	314.0	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	METHOD	7471A	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	METHOD	8015B	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	METHOD	8015M	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	METHOD	8315A	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0	6158224	N	METHOD	9012B	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0DUP	P158224D291230A	DUP	Gen Prep	9045M	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0MSD	P158224M261321	MSD	3546	1625C	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0MSD	P158224M320158A	MSD	3550B	8015M	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0MS	P158224R211655A	MS	5035	8260B	III
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0MS	P158224R261303	MS	3546	1625C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Dec-2010	SL-026-SA5C-SB-4.0-5.0MS	P158224R320133A	MS	3550B	8015M	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	3050B	6010B	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	3050B	6020	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	3060A	7199	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	3546	1625C	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	3550B	8015B	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	3550B	8015M	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	3550B	8082	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	3550B	8270C	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	3550B	8270C SIM	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	5035	8015M	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	5035	8260B	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	5035	8260B SIM	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	8330	8330A	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	Gen Prep	9045M	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	METHOD	300.0	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	METHOD	314.0	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	METHOD	7471A	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	METHOD	8015B	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	METHOD	8015M	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	METHOD	8315A	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0	6158225	N	METHOD	9012B	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0DU	P158225D221936	DUP	METHOD	7471A	III
07-Dec-2010	SL-026-SA5C-SB-9.0-10.0MS	P158225R221937	MS	METHOD	7471A	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	3050B	6010B	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	3060A	7199	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	3546	1625C	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	3550B	8015B	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	3550B	8015M	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	3550B	8082	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	3550B	8270C	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	3550B	8270C SIM	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	5035	8015M	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	5035	8260B	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	5035	8260B SIM	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	8330	8330A	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	Gen Prep	9045M	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	METHOD	300.0	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	METHOD	314.0	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	METHOD	7471A	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	METHOD	8015B	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	METHOD	8015M	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	METHOD	8315A	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5	6158226	N	METHOD	9012B	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5DUP	P158226D272348B	DUP	METHOD	314.0	III
07-Dec-2010	SL-027-SA5C-SB-2.5-3.5MS	P158226R270013B	MS	METHOD	314.0	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	3050B	6010B	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	3050B	6020	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	3060A	7199	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	3546	1625C	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	3550B	8015M	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	3550B	8082	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	3550B	8270C	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	3550B	8270C SIM	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	5035	8015M	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	5035	8260B	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	5035	8260B SIM	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	8330	8330A	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	Gen Prep	9045M	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	METHOD	300.0	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	METHOD	314.0	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	METHOD	7471A	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	METHOD	8015B	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	METHOD	8015M	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	METHOD	8315A	III
07-Dec-2010	SL-027-SA5C-SB-9.0-10.0	6158227	N	METHOD	9012B	III
07-Dec-2010	EB13-SA5C-120710	6158233	EB	3005A	6010B	III
07-Dec-2010	EB13-SA5C-120710	6158233	EB	3020A	6020	III
07-Dec-2010	EB13-SA5C-120710	6158233	EB	3510C	8082	III
07-Dec-2010	EB13-SA5C-120710	6158233	EB	3510C	8270C	III
07-Dec-2010	EB13-SA5C-120710	6158233	EB	3510C	8270C SIM	III
07-Dec-2010	EB13-SA5C-120710	6158233	EB	5030B	8015M	III
07-Dec-2010	EB13-SA5C-120710	6158233	EB	5030B	8260B	III
07-Dec-2010	EB13-SA5C-120710	6158233	EB	5030B	8260B SIM	III
07-Dec-2010	EB13-SA5C-120710	6158233	EB	Gen Prep	300.0	III
07-Dec-2010	EB13-SA5C-120710	6158233	EB	Gen Prep	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Dec-2010	EB13-SA5C-120710	6158233	EB	Gen Prep	7199	III
07-Dec-2010	EB13-SA5C-120710	6158233	EB	Gen Prep	9040B	III
07-Dec-2010	EB13-SA5C-120710	6158233	EB	METHOD	7470A	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	3050B	6010B	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	3050B	6020	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	3060A	7199	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	3546	1625C	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	3550B	8015B	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	3550B	8015M	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	3550B	8082	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	3550B	8270C	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	3550B	8270C SIM	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	5035	8015M	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	5035	8260B	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	5035	8260B SIM	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	8330	8330A	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	Gen Prep	9045M	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	METHOD	300.0	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	METHOD	314.0	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	METHOD	7471A	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	METHOD	8015B	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	METHOD	8015M	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	METHOD	8315A	III
07-Dec-2010	SL-019-SA5C-SB-4.0-5.0	6158228	N	METHOD	9012B	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	3050B	6010B	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	3060A	7199	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	3546	1625C	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	3550B	8015B	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	3550B	8015M	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	3550B	8082	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	3550B	8270C	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	3550B	8270C SIM	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	5035	8015M	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	5035	8260B	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	5035	8260B SIM	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	8330	8330A	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	Gen Prep	9045M	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	METHOD	300.0	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	METHOD	314.0	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	METHOD	7471A	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	METHOD	8015B	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	METHOD	8015M	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	METHOD	8315A	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5	6158229	N	METHOD	9012B	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5DUP	P158229D271433A	DUP	METHOD	300.0	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5DUP	P158229D271557B	DUP	METHOD	9012B	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5MS	P158229R271448A	MS	METHOD	300.0	III
07-Dec-2010	SL-019-SA5C-SB-8.5-9.5MS	P158229R271558B	MS	METHOD	9012B	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	3050B	6010B	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	3050B	6020	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	3546	1625C	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	3550B	8015B	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	3550B	8015M	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	3550B	8082	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	3550B	8270C	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	3550B	8270C SIM	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	5035	8015M	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	5035	8260B	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	5035	8260B SIM	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	8330	8330A	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	Gen Prep	9045M	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	METHOD	300.0	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	METHOD	314.0	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	METHOD	7471A	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	METHOD	8015B	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	METHOD	8015M	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	METHOD	8315A	III
07-Dec-2010	SL-014-SA5C-SB-4.0-5.0	6158230	N	METHOD	9012B	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	3050B	6010B	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	3050B	6020	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	3060A	7199	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	3546	1625C	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	3550B	8015B	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	3550B	8015M	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	3550B	8082	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	3550B	8270C SIM	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	5035	8015M	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	5035	8260B	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	5035	8260B SIM	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	8330	8330A	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	Gen Prep	9045M	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	METHOD	300.0	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	METHOD	314.0	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	METHOD	7471A	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	METHOD	8015B	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	METHOD	8015M	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	METHOD	8315A	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0	6158231	N	METHOD	9012B	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0DU	P158231D221141	DUP	3050B	6010B	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0DU	P158231D221214	DUP	3050B	6010B	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0DU	P158231D221641	DUP	3050B	6010B	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0MS	P158231R221145	MS	3050B	6010B	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0MS	P158231R221218	MS	3050B	6010B	III
07-Dec-2010	SL-014-SA5C-SB-9.0-10.0MS	P158231R221645	MS	3050B	6010B	III
07-Dec-2010	TB-120710	6158232	TB	5030B	8015M	III
07-Dec-2010	TB-120710	6158232	TB	5030B	8260B	III
07-Dec-2010	TB-120710	6158232	TB	5030B	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-014-SA5C-SB-9.0-10.0 **Collected:** 12/7/2010 3:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.0	J	0.88	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5C-SB-8.5-9.5 **Collected:** 12/7/2010 2:04:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.3	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5C-SB-4.0-5.0 **Collected:** 12/7/2010 9:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.88	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-027-SA5C-SB-2.5-3.5 **Collected:** 12/7/2010 11:23:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Method Category: GENCHEM

Method: 314.0 **Matrix:** AQ

Sample ID: EB13-SA5C-120710 **Collected:** 12/7/2010 1:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	1.6	J	0.70	MDL	2.0	PQL	ug/L	J	Z

Method Category: GENCHEM

Method: 314.0 **Matrix:** SO

Sample ID: SL-026-SA5C-SB-9.0-10.0 **Collected:** 12/7/2010 9:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	15.2	J	10.2	MDL	34.1	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 314.0 **Matrix:** SO

Sample ID: SL-027-SA5C-SB-2.5-3.5 *Collected:* 12/7/2010 11:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	17.4	J	10.0	MDL	33.4	PQL	ug/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-014-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 3:29:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.02	J	0.935	MDL	5.25	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 3:29:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	1120		1.18	MDL	21.0	PQL	mg/Kg	J	Q, E

Sample ID: SL-014-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 3:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3100		18.9	MDL	52.5	PQL	mg/Kg	J	Q
TIN	1.73	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: SL-014-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 3:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.70	J	0.968	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 3:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	275		0.609	MDL	10.9	PQL	mg/Kg	J	Q, E
POTASSIUM	2510		19.6	MDL	54.4	PQL	mg/Kg	J	Q
TIN	2.45	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	0.969	J	0.914	MDL	5.44	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-019-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 1:55:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.08	J	0.953	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 1:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	169		0.600	MDL	10.7	PQL	mg/Kg	J	Q, E
POTASSIUM	2450		19.3	MDL	53.5	PQL	mg/Kg	J	Q
SODIUM	99.2	J	39.9	MDL	107	PQL	mg/Kg	J	Z
TIN	2.78	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.95	J	0.899	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5C-SB-8.5-9.5 *Collected:* 12/7/2010 2:04:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.83	J	0.945	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5C-SB-8.5-9.5 *Collected:* 12/7/2010 2:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	118		0.595	MDL	10.6	PQL	mg/Kg	J	Q, E
POTASSIUM	1750		19.1	MDL	53.1	PQL	mg/Kg	J	Q
TIN	2.24	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-026-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 9:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.29	J	0.959	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	159		0.603	MDL	10.8	PQL	mg/Kg	J	Q, E
POTASSIUM	2360		19.4	MDL	53.9	PQL	mg/Kg	J	Q
SODIUM	86.5	J	40.2	MDL	108	PQL	mg/Kg	J	Z
TIN	2.42	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-026-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 9:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.00	J	0.905	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 9:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.00	J	0.974	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	135		0.613	MDL	10.9	PQL	mg/Kg	J	Q, E
POTASSIUM	1890		19.7	MDL	54.7	PQL	mg/Kg	J	Q
TIN	2.72	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.35	J	0.919	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-027-SA5C-SB-2.5-3.5 *Collected:* 12/7/2010 11:23:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.58	J	0.992	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: SL-027-SA5C-SB-2.5-3.5 *Collected:* 12/7/2010 11:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	189		0.624	MDL	11.1	PQL	mg/Kg	J	Q, E
POTASSIUM	2660		20.1	MDL	55.7	PQL	mg/Kg	J	Q
SODIUM	63.5	J	41.6	MDL	111	PQL	mg/Kg	J	Z
TIN	2.65	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.19	J	0.936	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: SL-027-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 11:25:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.91	J	0.986	MDL	5.54	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-027-SA5C-SB-9.0-10.0 **Collected:** 12/7/2010 11:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	137		0.621	MDL	11.1	PQL	mg/Kg	J	Q, E
POTASSIUM	1460		19.9	MDL	55.4	PQL	mg/Kg	J	Q
TIN	2.40	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.54	J	0.931	MDL	5.54	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-014-SA5C-SB-4.0-5.0 **Collected:** 12/7/2010 3:29:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0466	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5C-SB-4.0-5.0 **Collected:** 12/7/2010 3:29:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	93.7		0.115	MDL	0.424	PQL	mg/Kg	J	E, A

Sample ID: SL-014-SA5C-SB-4.0-5.0 **Collected:** 12/7/2010 3:29:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0637	U	0.0637	MDL	0.212	PQL	mg/Kg	UJ	Q
ARSENIC	2.76		0.0637	MDL	0.424	PQL	mg/Kg	J	Q
BERYLLIUM	0.310		0.0170	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.0747	J	0.0382	MDL	0.106	PQL	mg/Kg	J	Z
CHROMIUM	10.7		0.127	MDL	0.424	PQL	mg/Kg	J	Q, A
COBALT	5.78		0.0212	MDL	0.106	PQL	mg/Kg	J	A
COPPER	12.2		0.0700	MDL	0.424	PQL	mg/Kg	J	Q, A
LEAD	3.67		0.0110	MDL	0.212	PQL	mg/Kg	J	Q
NICKEL	6.48		0.106	MDL	0.424	PQL	mg/Kg	J	Q
SILVER	0.0163	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	35.5		0.0233	MDL	0.106	PQL	mg/Kg	J	Q, A
ZINC	53.7		0.594	MDL	3.18	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-014-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 3:35:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.125	J	0.0423	MDL	0.423	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 3:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	104		0.114	MDL	0.423	PQL	mg/Kg	J	E, A

Sample ID: SL-014-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 3:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0894	J	0.0634	MDL	0.211	PQL	mg/Kg	J	Z, Q
ARSENIC	5.14		0.0634	MDL	0.423	PQL	mg/Kg	J	Q
BERYLLIUM	0.676		0.0169	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	23.0		0.127	MDL	0.423	PQL	mg/Kg	J	Q, A
COBALT	6.44		0.0211	MDL	0.106	PQL	mg/Kg	J	A
COPPER	10.8		0.0697	MDL	0.423	PQL	mg/Kg	J	Q, A
LEAD	8.17		0.0110	MDL	0.211	PQL	mg/Kg	J	Q
NICKEL	12.7		0.106	MDL	0.423	PQL	mg/Kg	J	Q
SILVER	0.0402	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	44.8		0.0232	MDL	0.106	PQL	mg/Kg	J	Q, A
ZINC	62.0		0.592	MDL	3.17	PQL	mg/Kg	J	E

Sample ID: SL-019-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 1:55:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.104	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 1:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	116		0.120	MDL	0.445	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-019-SA5C-SB-4.0-5.0 **Collected:** 12/7/2010 1:55:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0743	J	0.0668	MDL	0.223	PQL	mg/Kg	J	Z, Q
ARSENIC	4.90		0.0668	MDL	0.445	PQL	mg/Kg	J	Q
BERYLLIUM	0.785		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	23.3		0.134	MDL	0.445	PQL	mg/Kg	J	Q, A
COBALT	7.93		0.0223	MDL	0.111	PQL	mg/Kg	J	A
COPPER	9.40		0.0735	MDL	0.445	PQL	mg/Kg	J	Q, A
LEAD	7.35		0.0116	MDL	0.223	PQL	mg/Kg	J	Q
NICKEL	13.9		0.111	MDL	0.445	PQL	mg/Kg	J	Q
SILVER	0.0540	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	47.9		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, A
ZINC	51.9		0.624	MDL	3.34	PQL	mg/Kg	J	E

Sample ID: SL-019-SA5C-SB-8.5-9.5 **Collected:** 12/7/2010 2:04:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	97.5		0.120	MDL	0.446	PQL	mg/Kg	J	E, A

Sample ID: SL-019-SA5C-SB-8.5-9.5 **Collected:** 12/7/2010 2:04:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0669	U	0.0669	MDL	0.223	PQL	mg/Kg	UJ	Q
ARSENIC	6.14		0.0669	MDL	0.446	PQL	mg/Kg	J	Q
BERYLLIUM	0.599		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.0559	J	0.0401	MDL	0.111	PQL	mg/Kg	J	Z
CHROMIUM	21.2		0.134	MDL	0.446	PQL	mg/Kg	J	Q, A
COBALT	3.97		0.0223	MDL	0.111	PQL	mg/Kg	J	A
COPPER	8.05		0.0736	MDL	0.446	PQL	mg/Kg	J	Q, A
LEAD	6.41		0.0116	MDL	0.223	PQL	mg/Kg	J	Q
NICKEL	8.93		0.111	MDL	0.446	PQL	mg/Kg	J	Q
SILVER	0.0372	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	40.5		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, A
ZINC	50.7		0.624	MDL	3.34	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-026-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 9:30:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.139	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 9:30:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	141		0.115	MDL	0.427	PQL	mg/Kg	J	E, A

Sample ID: SL-026-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 9:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0792	J	0.0640	MDL	0.213	PQL	mg/Kg	J	Z, Q
ARSENIC	4.72		0.0640	MDL	0.427	PQL	mg/Kg	J	Q
BERYLLIUM	0.790		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	22.6		0.128	MDL	0.427	PQL	mg/Kg	J	Q, A
COBALT	8.86		0.0213	MDL	0.107	PQL	mg/Kg	J	A
COPPER	13.2		0.0704	MDL	0.427	PQL	mg/Kg	J	Q, A
LEAD	6.85		0.0111	MDL	0.213	PQL	mg/Kg	J	Q
NICKEL	15.5		0.107	MDL	0.427	PQL	mg/Kg	J	Q
SILVER	0.0315	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	43.6		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, A
ZINC	54.3		0.597	MDL	3.20	PQL	mg/Kg	J	E

Sample ID: SL-026-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 9:35:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0622	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 9:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	69.1		0.119	MDL	0.442	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE030 **Laboratory:** LL

EDD Filename: PrepDE030_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-026-SA5C-SB-9.0-10.0 **Collected:** 12/7/2010 9:35:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0663	U	0.0663	MDL	0.221	PQL	mg/Kg	UJ	Q
ARSENIC	4.58		0.0663	MDL	0.442	PQL	mg/Kg	J	Q
BERYLLIUM	0.699		0.0177	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.0477	J	0.0398	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	23.2		0.133	MDL	0.442	PQL	mg/Kg	J	Q, A
COBALT	4.38		0.0221	MDL	0.110	PQL	mg/Kg	J	A
COPPER	8.40		0.0729	MDL	0.442	PQL	mg/Kg	J	Q, A
LEAD	5.81		0.0115	MDL	0.221	PQL	mg/Kg	J	Q
NICKEL	11.5		0.110	MDL	0.442	PQL	mg/Kg	J	Q
SILVER	0.0354	J	0.0133	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	43.1		0.0243	MDL	0.110	PQL	mg/Kg	J	Q, A
ZINC	45.3		0.619	MDL	3.31	PQL	mg/Kg	J	E

Sample ID: SL-027-SA5C-SB-2.5-3.5 **Collected:** 12/7/2010 11:23:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.129	J	0.0429	MDL	0.429	PQL	mg/Kg	J	Z

Sample ID: SL-027-SA5C-SB-2.5-3.5 **Collected:** 12/7/2010 11:23:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	121		0.116	MDL	0.429	PQL	mg/Kg	J	E, A

Sample ID: SL-027-SA5C-SB-2.5-3.5 **Collected:** 12/7/2010 11:23:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0643	U	0.0643	MDL	0.214	PQL	mg/Kg	UJ	Q
ARSENIC	3.54		0.0643	MDL	0.429	PQL	mg/Kg	J	Q
BERYLLIUM	0.634		0.0172	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	17.8		0.129	MDL	0.429	PQL	mg/Kg	J	Q, A
COBALT	5.85		0.0214	MDL	0.107	PQL	mg/Kg	J	A
COPPER	10.0		0.0707	MDL	0.429	PQL	mg/Kg	J	Q, A
LEAD	5.12		0.0111	MDL	0.214	PQL	mg/Kg	J	Q
NICKEL	11.7		0.107	MDL	0.429	PQL	mg/Kg	J	Q
SILVER	0.0441	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-027-SA5C-SB-2.5-3.5 **Collected:** 12/7/2010 11:23:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	34.2		0.0236	MDL	0.107	PQL	mg/Kg	J	Q, A
ZINC	42.9		0.600	MDL	3.22	PQL	mg/Kg	J	E

Sample ID: SL-027-SA5C-SB-9.0-10.0 **Collected:** 12/7/2010 11:25:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	112		0.122	MDL	0.452	PQL	mg/Kg	J	E, A

Sample ID: SL-027-SA5C-SB-9.0-10.0 **Collected:** 12/7/2010 11:25:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0678	J	0.0678	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	3.21		0.0678	MDL	0.452	PQL	mg/Kg	J	Q
BERYLLIUM	0.581		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	23.8		0.136	MDL	0.452	PQL	mg/Kg	J	Q, A
COBALT	4.52		0.0226	MDL	0.113	PQL	mg/Kg	J	A
COPPER	8.18		0.0746	MDL	0.452	PQL	mg/Kg	J	Q, A
LEAD	5.43		0.0118	MDL	0.226	PQL	mg/Kg	J	Q
NICKEL	11.6		0.113	MDL	0.452	PQL	mg/Kg	J	Q
SILVER	0.0564	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	36.4		0.0249	MDL	0.113	PQL	mg/Kg	J	Q, A
ZINC	49.1		0.633	MDL	3.39	PQL	mg/Kg	J	E

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-026-SA5C-SB-4.0-5.0 **Collected:** 12/7/2010 9:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.92	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A Matrix: SO

Sample ID: SL-014-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 3:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0239	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 3:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0042	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 1:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0044	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0053	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M Matrix: SO

Sample ID: SL-014-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 3:29:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.96	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 3:35:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.51	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 1:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.55	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	1.2	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-019-SA5C-SB-8.5-9.5 *Collected:* 12/7/2010 2:04:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.6	U	5.6	MDL	14	PQL	mg/Kg	UJ	S
ETHYLENE GLYCOL	13	U	13	MDL	14	PQL	mg/Kg	UJ	S
Propylene glycol	5.6	U	5.6	MDL	14	PQL	mg/Kg	UJ	S

Sample ID: SL-019-SA5C-SB-8.5-9.5 *Collected:* 12/7/2010 2:04:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.51	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 9:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.53	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 9:35:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.83	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-027-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 11:25:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.63	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-014-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 3:29:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.7	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE030 **Laboratory: LL**

EDD Filename: PrepDE030_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-014-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 3:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	0.98	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1254	0.88	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.64	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.0	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: EB13-SA5C-120710 *Collected:* 12/7/2010 1:00:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	10	U	10	MDL	30	PQL	ug/L	UJ	L, E
4-CHLOROANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	L, E
ANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	L
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	R	L

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB13-SA5C-120710 *Collected:* 12/7/2010 1:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.33	J	0.052	MDL	1.0	PQL	ug/L	U	B
Diethylphthalate	0.14	J	0.052	MDL	1.0	PQL	ug/L	J	Z
Dimethylphthalate	0.052	U	0.052	MDL	1.0	PQL	ug/L	UJ	L
Di-n-butylphthalate	0.61	J	0.052	MDL	1.0	PQL	ug/L	J	Z
Di-n-octylphthalate	0.071	J	0.052	MDL	1.0	PQL	ug/L	U	B
NAPHTHALENE	0.033	J	0.010	MDL	0.052	PQL	ug/L	J	Z
N-NITROSODIMETHYLAMINE	0.024	J	0.010	MDL	0.052	PQL	ug/L	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE030 **Laboratory:** LL

EDD Filename: PrepDE030_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-014-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 3:29:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.91	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.0	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-014-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 3:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.45	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.92	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-026-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 9:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.78	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-014-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 3:29:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	320	J	110	MDL	550	PQL	ug/Kg	J	Z
METHANOL	260	J	110	MDL	550	PQL	ug/Kg	J	Z

Sample ID: SL-014-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 3:35:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	300	J	110	MDL	550	PQL	ug/Kg	J	Z
METHANOL	220	J	110	MDL	550	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-019-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 1:55:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	260	J	110	MDL	560	PQL	ug/Kg	J	Z
METHANOL	190	J	110	MDL	560	PQL	ug/Kg	J	Z

Sample ID: SL-019-SA5C-SB-8.5-9.5 *Collected:* 12/7/2010 2:04:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	270	J	110	MDL	560	PQL	ug/Kg	J	Z
METHANOL	200	J	110	MDL	560	PQL	ug/Kg	J	Z

Sample ID: SL-026-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 9:30:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	130	J	110	MDL	550	PQL	ug/Kg	J	Z

Sample ID: SL-026-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 9:35:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	150	J	110	MDL	570	PQL	ug/Kg	J	Z
METHANOL	130	J	110	MDL	570	PQL	ug/Kg	J	Z

Sample ID: SL-027-SA5C-SB-2.5-3.5 *Collected:* 12/7/2010 11:23:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	200	J	110	MDL	560	PQL	ug/Kg	J	Z
METHANOL	290	J	110	MDL	560	PQL	ug/Kg	J	Z

Sample ID: SL-027-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 11:25:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	250	J	110	MDL	570	PQL	ug/Kg	J	Z
METHANOL	160	J	110	MDL	570	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-014-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 3:29:00 *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.45	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-014-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 3:35:00 *Analysis Type:* RES *Dilution:* 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.47	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-019-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 1:55:00 *Analysis Type:* RES *Dilution:* 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.41	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-019-SA5C-SB-8.5-9.5 *Collected:* 12/7/2010 2:04:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7.9	J	6.7	MDL	8.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.57	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-026-SA5C-SB-4.0-5.0 *Collected:* 12/7/2010 9:30:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.62	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-026-SA5C-SB-9.0-10.0 *Collected:* 12/7/2010 9:35:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.48	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-027-SA5C-SB-2.5-3.5 *Collected:* 12/7/2010 11:23:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.51	J	0.22	MDL	3.7	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.07	MDL	3.7	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE030 **Laboratory:** LL

EDD Filename: PrepDE030_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-027-SA5C-SB-9.0-10.0 ***Collected:*** 12/7/2010 11:25:00 ***Analysis Type:*** RES ***Dilution:*** 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.49	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE030 **Laboratory: LL**

EDD Filename: PrepDE030_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE030 **Laboratory: LL**

EDD Filename: PrepDE030_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE030 **Laboratory: LL**

EDD Filename: PrepDE030_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE030

Method Blank Outlier Report

Lab Reporting Batch ID: DE030 **Laboratory: LL**

EDD Filename: DE030_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34308BB221131	12/14/2010 11:31:00 AM	LITHIUM	0.50 mg/Kg	SL-014-SA5C-SB-4.0-5.0 SL-014-SA5C-SB-9.0-10.0 SL-019-SA5C-SB-4.0-5.0 SL-019-SA5C-SB-8.5-9.5 SL-026-SA5C-SB-4.0-5.0 SL-026-SA5C-SB-9.0-10.0 SL-027-SA5C-SB-2.5-3.5 SL-027-SA5C-SB-9.0-10.0
P34308BB221623	12/12/2010 4:23:00 PM	ALUMINUM CALCIUM PHOSPHORUS TIN	6.22 mg/Kg 7.06 mg/Kg 0.819 mg/Kg 1.73 mg/Kg	SL-014-SA5C-SB-4.0-5.0 SL-014-SA5C-SB-9.0-10.0 SL-019-SA5C-SB-4.0-5.0 SL-019-SA5C-SB-8.5-9.5 SL-026-SA5C-SB-4.0-5.0 SL-026-SA5C-SB-9.0-10.0 SL-027-SA5C-SB-2.5-3.5 SL-027-SA5C-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-014-SA5C-SB-4.0-5.0(RES)	TIN	1.73 mg/Kg	1.73U mg/Kg
SL-014-SA5C-SB-9.0-10.0(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-019-SA5C-SB-4.0-5.0(RES)	TIN	2.78 mg/Kg	2.78U mg/Kg
SL-019-SA5C-SB-8.5-9.5(RES)	TIN	2.24 mg/Kg	2.24U mg/Kg
SL-026-SA5C-SB-4.0-5.0(RES)	TIN	2.42 mg/Kg	2.42U mg/Kg
SL-026-SA5C-SB-9.0-10.0(RES)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-027-SA5C-SB-2.5-3.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-027-SA5C-SB-9.0-10.0(RES)	TIN	2.40 mg/Kg	2.40U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34326AB221128A	12/13/2010 11:28:00 AM	COPPER LEAD	0.284 mg/Kg 0.0130 mg/Kg	SL-014-SA5C-SB-4.0-5.0 SL-014-SA5C-SB-9.0-10.0 SL-019-SA5C-SB-4.0-5.0 SL-019-SA5C-SB-8.5-9.5 SL-026-SA5C-SB-4.0-5.0 SL-026-SA5C-SB-9.0-10.0 SL-027-SA5C-SB-2.5-3.5 SL-027-SA5C-SB-9.0-10.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE030 **Laboratory: LL**

EDD Filename: DE030_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB11B211147A	12/9/2010 11:47:00 AM	BENZENE METHYLENE CHLORIDE TOLUENE	0.10 ug/Kg 0.59 ug/Kg 0.12 ug/Kg	SL-014-SA5C-SB-4.0-5.0 SL-014-SA5C-SB-9.0-10.0 SL-019-SA5C-SB-4.0-5.0 SL-019-SA5C-SB-8.5-9.5 SL-026-SA5C-SB-4.0-5.0 SL-026-SA5C-SB-9.0-10.0 SL-027-SA5C-SB-2.5-3.5 SL-027-SA5C-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-014-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.45 ug/Kg	3.9U ug/Kg
SL-014-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.47 ug/Kg	4.4U ug/Kg
SL-019-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.41 ug/Kg	3.7U ug/Kg
SL-019-SA5C-SB-8.5-9.5(RES)	METHYLENE CHLORIDE	0.57 ug/Kg	4.0U ug/Kg
SL-026-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.62 ug/Kg	4.2U ug/Kg
SL-026-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.48 ug/Kg	3.8U ug/Kg
SL-027-SA5C-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.51 ug/Kg	3.7U ug/Kg
SL-027-SA5C-SB-2.5-3.5(RES)	TOLUENE	0.09 ug/Kg	3.7U ug/Kg
SL-027-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.49 ug/Kg	4.1U ug/Kg
SL-027-SA5C-SB-9.0-10.0(RES)	TOLUENE	0.08 ug/Kg	4.1U ug/Kg

Method: **8270C SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWE34B261012	12/9/2010 10:12:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-octylphthalate	0.16 ug/L 0.052 ug/L	EB13-SA5C-120710

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB13-SA5C-120710(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.33 ug/L	1.0U ug/L
EB13-SA5C-120710(RES)	Di-n-octylphthalate	0.071 ug/L	1.0U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: DE030_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-014-SA5C-SB-9.0-10.0MS **SL-014-SA5C-SB-9.0-10.0MSD** (SL-014-SA5C-SB-4.0-5.0 SL-014-SA5C-SB-9.0-10.0 SL-019-SA5C-SB-4.0-5.0 SL-019-SA5C-SB-8.5-9.5 SL-026-SA5C-SB-4.0-5.0 SL-026-SA5C-SB-9.0-10.0 SL-027-SA5C-SB-2.5-3.5 SL-027-SA5C-SB-9.0-10.0)	ALUMINUM CALCIUM IRON MAGNESIUM POTASSIUM TITANIUM	3178 395 3285 418 139 255	2676 382 6801 633 197 435	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - -	ALUMINUM CALCIUM IRON MAGNESIUM POTASSIUM TITANIUM	J (all detects) Al, Ca, Fe, Mg, Ti No Qual. >4x
SL-014-SA5C-SB-9.0-10.0MS **SL-014-SA5C-SB-9.0-10.0MSD** (SL-014-SA5C-SB-4.0-5.0 SL-014-SA5C-SB-9.0-10.0 SL-019-SA5C-SB-4.0-5.0 SL-019-SA5C-SB-8.5-9.5 SL-026-SA5C-SB-4.0-5.0 SL-026-SA5C-SB-9.0-10.0 SL-027-SA5C-SB-2.5-3.5 SL-027-SA5C-SB-9.0-10.0)	MANGANESE	-34	17	75.00-125.00	-	MANGANESE	No Qual, >4x
SL-014-SA5C-SB-9.0-10.0MSD (SL-014-SA5C-SB-4.0-5.0 SL-014-SA5C-SB-9.0-10.0 SL-019-SA5C-SB-4.0-5.0 SL-019-SA5C-SB-8.5-9.5 SL-026-SA5C-SB-4.0-5.0 SL-026-SA5C-SB-9.0-10.0 SL-027-SA5C-SB-2.5-3.5 SL-027-SA5C-SB-9.0-10.0)	PHOSPHORUS	-	220	75.00-125.00	23 (20.00)	PHOSPHORUS	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: DE030_v1 eQAPP Name: CDM_SSFL_110509

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-026-SA5C-SB-9.0-10.0DUP (SL-014-SA5C-SB-4.0-5.0 SL -014-SA5C-SB-9.0-10.0 SL -019-SA5C-SB-4.0-5.0 SL -019-SA5C-SB-8.5-9.5 SL -026-SA5C-SB-4.0-5.0 SL -026-SA5C-SB-9.0-10.0 SL -027-SA5C-SB-2.5-3.5 SL -027-SA5C-SB-9.0-10.0)	MERCURY	38	20.00	No Qual OK by difference

Method: 314.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-027-SA5C-SB-2.5-3.5DUP (SL-014-SA5C-SB-4.0-5.0 SL -014-SA5C-SB-9.0-10.0 SL -019-SA5C-SB-4.0-5.0 SL -019-SA5C-SB-8.5-9.5 SL -027-SA5C-SB-2.5-3.5 SL -027-SA5C-SB-9.0-10.0)	PERCHLORATE	200	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-014-SA5C-SB-9.0-10.0DUP (SL-014-SA5C-SB-4.0-5.0 SL -014-SA5C-SB-9.0-10.0 SL -019-SA5C-SB-4.0-5.0 SL -019-SA5C-SB-8.5-9.5 SL -026-SA5C-SB-4.0-5.0 SL -026-SA5C-SB-9.0-10.0 SL -027-SA5C-SB-2.5-3.5 SL -027-SA5C-SB-9.0-10.0)	Zirconium	42	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE030 Laboratory: LL

EDD Filename: PrepDE030_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2WELCSQ261046 P2WELCSY261119 (EB13-SA5C-120710)	Dimethylphthalate N-NITROSODIMETHYLAMINE	68 63	- 58	70.00-130.00 70.00-130.00	- -	Dimethylphthalate N-NITROSODIMETHYLAMINE	J (all detects) UJ (all non-detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P5WCLCSQ260103 P5WCLCSY260129 (EB13-SA5C-120710)	BENZOIC ACID	0	-	10.00-69.00	200 (30.00)	BENZOIC ACID	J(all detects) R(all non-detects)
P5WCLCSQ260103 P5WCLCSY260129 (EB13-SA5C-120710)	2,4-DINITROPHENOL 4-CHLOROANILINE ANILINE	57 - -	- 39 43	64.00-120.00 42.00-124.00 49.00-101.00	41 (30.00) 39 (30.00) -	2,4-DINITROPHENOL 4-CHLOROANILINE ANILINE	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P34326AQ221131A (SL-014-SA5C-SB-4.0-5.0 SL -014-SA5C-SB-9.0-10.0 SL -019-SA5C-SB-4.0-5.0 SL -019-SA5C-SB-8.5-9.5 SL -026-SA5C-SB-4.0-5.0 SL -026-SA5C-SB-9.0-10.0 SL -027-SA5C-SB-2.5-3.5 SL -027-SA5C-SB-9.0-10.0)	ANTIMONY	62	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B11Q211344A (SL-014-SA5C-SB-4.0-5.0 SL -014-SA5C-SB-9.0-10.0 SL -019-SA5C-SB-4.0-5.0 SL -019-SA5C-SB-8.5-9.5 SL -026-SA5C-SB-4.0-5.0 SL -026-SA5C-SB-9.0-10.0 SL -027-SA5C-SB-2.5-3.5 SL -027-SA5C-SB-9.0-10.0)	Chlorotrifluoroethylene	134	-	22.00-131.00	-	Chlorotrifluoroethylene	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE030 **Laboratory: LL**

EDD Filename: DE030_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015M**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-019-SA5C-SB-8.5-9.5	TETRAMETHYLENE GLYCOL	27	29.00-137.00	All Target Analytes	J (all detects) UJ (all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE030 **Laboratory: LL**

EDD Filename: DE030_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 314.0

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB13-SA5C-120710	PERCHLORATE	J	1.6	2.0	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB13-SA5C-120710	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.33	1.0	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.14	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.61	1.0	PQL	ug/L	
	Di-n-octylphthalate	J	0.071	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.033	0.052	PQL	ug/L	
	N-NITROSODIMETHYLAMINE	J	0.024	0.052	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5C-SB-9.0-10.0	Nitrate-NO3	J	1.0	1.6	PQL	mg/Kg	J (all detects)
SL-019-SA5C-SB-8.5-9.5	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)
SL-026-SA5C-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.6	PQL	mg/Kg	J (all detects)
SL-027-SA5C-SB-2.5-3.5	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)

Method: 314.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5C-SB-9.0-10.0	PERCHLORATE	J	15.2	34.1	PQL	ug/Kg	J (all detects)
SL-027-SA5C-SB-2.5-3.5	PERCHLORATE	J	17.4	33.4	PQL	ug/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5C-SB-4.0-5.0	BORON	J	3.02	5.25	PQL	mg/Kg	J (all detects)
	TIN	J	1.73	10.5	PQL	mg/Kg	
SL-014-SA5C-SB-9.0-10.0	BORON	J	4.70	5.44	PQL	mg/Kg	J (all detects)
	TIN	J	2.45	10.9	PQL	mg/Kg	
	Zirconium	J	0.969	5.44	PQL	mg/Kg	
SL-019-SA5C-SB-4.0-5.0	BORON	J	5.08	5.35	PQL	mg/Kg	J (all detects)
	SODIUM	J	99.2	107	PQL	mg/Kg	
	TIN	J	2.78	10.7	PQL	mg/Kg	
	Zirconium	J	1.95	5.35	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE030 **Laboratory: LL**

EDD Filename: DE030_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-019-SA5C-SB-8.5-9.5	BORON	J	2.83	5.31	PQL	mg/Kg	J (all detects)
	TIN	J	2.24	10.6	PQL	mg/Kg	
SL-026-SA5C-SB-4.0-5.0	BORON	J	3.29	5.39	PQL	mg/Kg	J (all detects)
	SODIUM	J	86.5	108	PQL	mg/Kg	
	TIN	J	2.42	10.8	PQL	mg/Kg	
	Zirconium	J	2.00	5.39	PQL	mg/Kg	
SL-026-SA5C-SB-9.0-10.0	BORON	J	3.00	5.47	PQL	mg/Kg	J (all detects)
	TIN	J	2.72	10.9	PQL	mg/Kg	
	Zirconium	J	2.35	5.47	PQL	mg/Kg	
SL-027-SA5C-SB-2.5-3.5	BORON	J	3.58	5.57	PQL	mg/Kg	J (all detects)
	SODIUM	J	63.5	111	PQL	mg/Kg	
	TIN	J	2.65	11.1	PQL	mg/Kg	
	Zirconium	J	2.19	5.57	PQL	mg/Kg	
SL-027-SA5C-SB-9.0-10.0	BORON	J	2.91	5.54	PQL	mg/Kg	J (all detects)
	TIN	J	2.40	11.1	PQL	mg/Kg	
	Zirconium	J	1.54	5.54	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5C-SB-4.0-5.0	CADMIUM	J	0.0747	0.106	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0466	0.424	PQL	mg/Kg	
	SILVER	J	0.0163	0.106	PQL	mg/Kg	
SL-014-SA5C-SB-9.0-10.0	ANTIMONY	J	0.0894	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.125	0.423	PQL	mg/Kg	
	SILVER	J	0.0402	0.106	PQL	mg/Kg	
SL-019-SA5C-SB-4.0-5.0	ANTIMONY	J	0.0743	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.104	0.445	PQL	mg/Kg	
	SILVER	J	0.0540	0.111	PQL	mg/Kg	
SL-019-SA5C-SB-8.5-9.5	CADMIUM	J	0.0559	0.111	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0372	0.111	PQL	mg/Kg	
SL-026-SA5C-SB-4.0-5.0	ANTIMONY	J	0.0792	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.139	0.427	PQL	mg/Kg	
	SILVER	J	0.0315	0.107	PQL	mg/Kg	
SL-026-SA5C-SB-9.0-10.0	CADMIUM	J	0.0477	0.110	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0622	0.442	PQL	mg/Kg	
	SILVER	J	0.0354	0.110	PQL	mg/Kg	
SL-027-SA5C-SB-2.5-3.5	SELENIUM	J	0.129	0.429	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0441	0.107	PQL	mg/Kg	
SL-027-SA5C-SB-9.0-10.0	ANTIMONY	J	0.0678	0.226	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0564	0.113	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.92	1.1	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE030 **Laboratory: LL**

EDD Filename: DE030_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5C-SB-4.0-5.0	MERCURY	J	0.0239	0.105	PQL	mg/Kg	J (all detects)
SL-014-SA5C-SB-9.0-10.0	MERCURY	J	0.0042	0.106	PQL	mg/Kg	J (all detects)
SL-019-SA5C-SB-4.0-5.0	MERCURY	J	0.0044	0.109	PQL	mg/Kg	J (all detects)
SL-026-SA5C-SB-9.0-10.0	MERCURY	J	0.0053	0.106	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5C-SB-4.0-5.0	ETHANOL METHANOL	J J	320 260	550 550	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-014-SA5C-SB-9.0-10.0	ETHANOL METHANOL	J J	300 220	550 550	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-019-SA5C-SB-4.0-5.0	ETHANOL METHANOL	J J	260 190	560 560	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-019-SA5C-SB-8.5-9.5	ETHANOL METHANOL	J J	270 200	560 560	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-026-SA5C-SB-4.0-5.0	ETHANOL	J	130	550	PQL	ug/Kg	J (all detects)
SL-026-SA5C-SB-9.0-10.0	ETHANOL METHANOL	J J	150 130	570 570	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-027-SA5C-SB-2.5-3.5	ETHANOL METHANOL	J J	200 290	560 560	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-027-SA5C-SB-9.0-10.0	ETHANOL METHANOL	J J	250 160	570 570	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5C-SB-4.0-5.0	EFH (C15-C20)	J	0.96	1.3	PQL	mg/Kg	J (all detects)
SL-014-SA5C-SB-9.0-10.0	EFH (C15-C20)	J	0.51	1.3	PQL	mg/Kg	J (all detects)
SL-019-SA5C-SB-4.0-5.0	EFH (C21-C30) EFH (C30-C40)	J J	0.55 1.2	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-019-SA5C-SB-8.5-9.5	EFH (C30-C40)	J	0.51	1.3	PQL	mg/Kg	J (all detects)
SL-026-SA5C-SB-4.0-5.0	EFH (C21-C30)	J	0.53	1.3	PQL	mg/Kg	J (all detects)
SL-026-SA5C-SB-9.0-10.0	EFH (C30-C40)	J	0.83	1.4	PQL	mg/Kg	J (all detects)
SL-027-SA5C-SB-9.0-10.0	EFH (C30-C40)	J	0.63	1.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE030 **Laboratory: LL**

EDD Filename: DE030_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5C-SB-4.0-5.0	AROCLOR 1260	J	1.4	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.7	3.6	PQL	ug/Kg	
SL-014-SA5C-SB-9.0-10.0	AROCLOR 1248	J	0.98	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1254	J	0.88	1.9	PQL	ug/Kg	
	AROCLOR 1260	J	0.64	1.9	PQL	ug/Kg	
	Aroclor 5460	J	2.0	3.6	PQL	ug/Kg	

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.45	3.9	PQL	ug/Kg	J (all detects)
SL-014-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.47	4.4	PQL	ug/Kg	J (all detects)
SL-019-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.41	3.7	PQL	ug/Kg	J (all detects)
SL-019-SA5C-SB-8.5-9.5	ACETONE	J	7.9	8.0	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.57	4.0	PQL	ug/Kg	
SL-026-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.62	4.2	PQL	ug/Kg	J (all detects)
SL-026-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.48	3.8	PQL	ug/Kg	J (all detects)
SL-027-SA5C-SB-2.5-3.5	METHYLENE CHLORIDE	J	0.51	3.7	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	3.7	PQL	ug/Kg	
SL-027-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.49	4.1	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.08	4.1	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5C-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.91	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	1.8	PQL	ug/Kg	
SL-014-SA5C-SB-9.0-10.0	ANTHRACENE	J	0.45	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.1	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.92	1.8	PQL	ug/Kg	
SL-026-SA5C-SB-9.0-10.0	NAPHTHALENE	J	0.78	1.9	PQL	ug/Kg	J (all detects)

LDC #: 25337D4
SDG #: DE030
Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 5-5-11
Page: 1 of 2
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020~~A~~/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	ICB/CCB hits – No Qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (MS from DE029) (Al, Ca, Fe, Mg, Mn, Ti >4x)
VII.	Duplicate Sample Analysis	N	D.P ↓ (Hg, Zr <5xRL)
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	(MS from DE029) (Ba, Cr, Co, Cu, V)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	ND	EB=9

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: Soil/Water

1	SL-026-SA5C-SB-4.0-5.0	11	(#2) MSD Hg	21		31	
2	SL-026-SA5C-SB-9.0-10.0	12	↓ DUP ↓	22		32	
3	SL-027-SA5C-SB-2.5-3.5	13	(#8) MS ICP	23		33	
4	SL-027-SA5C-SB-9.0-10.0	14	MSD	24		34	
5	SL-019-SA5C-SB-4.0-5.0	15	↓ DUP ↓	25		35	
6	SL-019-SA5C-SB-8.5-9.5	16		26		36	
7	SL-014-SA5C-SB-4.0-5.0	17		27		37	
8	SL-014-SA5C-SB-9.0-10.0	18		28		38	
9	EB13-SA5C-120710 W	19		29		39	
10	(#2) MS Hg	20		30		40	

Notes: _____

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY FROM SDG: DE029
FORM 9
SERIAL DILUTIONS
SDG No.: DE030
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: *57194BKG Serial Dilution Lab Sample ID: *57194L
Batch ID(s): P34326A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Antimony	121	0.3304	B	1.5000	U	100		MS
Arsenic	75	20.2100		21.7000		7		MS
Barium	137	421.7000		467.9000		11	E	MS
Beryllium	9	2.6150		2.9365		12		MS
Cadmium	111	0.4996	B	0.9000	U	100		MS
Chromium	52	87.1900		104.6000		20	E	MS
Cobalt	59	22.4900		29.1400		30	E	MS
Copper	63	35.7700		47.6850		33	E	MS
Lead	208	26.8400		29.6350		10		MS
Molybdenum	98	2.5590		3.2525		27		MS
Nickel	60	46.6600		54.1000		16		MS
Selenium	78	0.6824	B	1.0000	U	100		MS
Silver	107	0.1500	B	0.3000	U	100		MS
Thallium	203	1.2010		1.1505	B	4		MS
Vanadium	51	164.7000		200.8000		22	E	MS
Zinc	66	267.8000		310.0000		16		MS

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE030 3825
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Dec-2010	EB14-SA5C-120810	6162870	EB	3510C	8015B	III
08-Dec-2010	EB14-SA5C-120810	6162870	EB	3510C	8015M	III
08-Dec-2010	EB14-SA5C-120810	6162870	EB	3520C	1625C	III
08-Dec-2010	EB14-SA5C-120810	6162870	EB	5030B	8015M	III
08-Dec-2010	EB14-SA5C-120810	6162870	EB	8330	8330A	III
08-Dec-2010	EB14-SA5C-120810	6162870	EB	Gen Prep	300.0	III
08-Dec-2010	EB14-SA5C-120810	6162870	EB	Gen Prep	8015B	III
08-Dec-2010	EB14-SA5C-120810	6162870	EB	Gen Prep	8015M	III
08-Dec-2010	EB14-SA5C-120810	6162870	EB	METHOD	8151A	III
08-Dec-2010	EB14-SA5C-120810	6162870	EB	METHOD	8315A	III
08-Dec-2010	EB14-SA5C-120810	6162870	EB	METHOD	9012B	III
08-Dec-2010	EB14-SA5C-120810MSD	P162870M322030A	MSD	Gen Prep	8015M	III
08-Dec-2010	EB14-SA5C-120810MS	P162870R322014A	MS	Gen Prep	8015M	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	3050B	6010B	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	3050B	6020	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	3060A	7199	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	3546	1625C	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	3550B	8015B	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	3550B	8015M	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	3550B	8082	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	3550B	8270C	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	3550B	8270C SIM	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	5035	8015M	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	5035	8260B	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	5035	8260B SIM	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	8330	8330A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	Gen Prep	9045M	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	METHOD	300.0	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	METHOD	314.0	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	METHOD	7471A	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	METHOD	8015B	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	METHOD	8015M	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	METHOD	8315A	III
08-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162857	N	METHOD	9012B	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	3050B	6010B	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	3050B	6020	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	3060A	7199	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	3546	1625C	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	3550B	8015B	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	3550B	8015M	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	3550B	8082	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	3550B	8270C	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	3550B	8270C SIM	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	5035	8015M	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	5035	8260B	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	5035	8260B SIM	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	8330	8330A	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	Gen Prep	9045M	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	METHOD	300.0	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	METHOD	314.0	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	METHOD	6850	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	METHOD	8015B	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	METHOD	8015M	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	METHOD	8315A	III
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162858	N	METHOD	9012B	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	3050B	6010B	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	3050B	6020	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	3060A	7199	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	3546	1625C	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	3550B	8015B	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	3550B	8015M	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	3550B	8082	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	3550B	8270C	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	3550B	8270C SIM	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	5035	8015M	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	5035	8260B	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	5035	8260B SIM	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	8330	8330A	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	Gen Prep	9045M	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	METHOD	300.0	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	METHOD	314.0	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	METHOD	6850	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	METHOD	7471A	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	METHOD	8015B	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	METHOD	8015M	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	METHOD	8315A	III
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162862	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	3050B	6010B	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	3050B	6020	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	3060A	7199	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	3546	1625C	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	3550B	8015B	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	3550B	8015M	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	3550B	8082	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	3550B	8270C	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	3550B	8270C SIM	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	5035	8015M	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	5035	8260B	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	5035	8260B SIM	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	8330	8330A	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	Gen Prep	9045M	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	METHOD	300.0	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	METHOD	314.0	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	METHOD	6850	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	METHOD	7471A	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	METHOD	8015B	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	METHOD	8015M	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	METHOD	8315A	III
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162863	N	METHOD	9012B	III
08-Dec-2010	SL-034-SA5B-SS-0.0-0.5	6162872	N	3050B	6010B	III
08-Dec-2010	SL-034-SA5B-SS-0.0-0.5	6162872	N	3050B	6020	III
08-Dec-2010	SL-034-SA5B-SS-0.0-0.5	6162872	N	3060A	7199	III
08-Dec-2010	SL-034-SA5B-SS-0.0-0.5	6162872	N	3550B	8081A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Dec-2010	SL-034-SA5B-SS-0.0-0.5	6162872	N	3550B	8082	III
08-Dec-2010	SL-034-SA5B-SS-0.0-0.5	6162872	N	3550B	8151A	III
08-Dec-2010	SL-034-SA5B-SS-0.0-0.5	6162872	N	3550B	8270C	III
08-Dec-2010	SL-034-SA5B-SS-0.0-0.5	6162872	N	3550B	8270C SIM	III
08-Dec-2010	SL-034-SA5B-SS-0.0-0.5	6162872	N	Gen Prep	9045M	III
08-Dec-2010	SL-034-SA5B-SS-0.0-0.5	6162872	N	METHOD	300.0	III
08-Dec-2010	SL-034-SA5B-SS-0.0-0.5	6162872	N	METHOD	314.0	III
08-Dec-2010	SL-034-SA5B-SS-0.0-0.5	6162872	N	METHOD	7471A	III
08-Dec-2010	SL-036-SA5B-SS-0.0-0.5	6162874	N	3050B	6010B	III
08-Dec-2010	SL-036-SA5B-SS-0.0-0.5	6162874	N	3050B	6020	III
08-Dec-2010	SL-036-SA5B-SS-0.0-0.5	6162874	N	3060A	7199	III
08-Dec-2010	SL-036-SA5B-SS-0.0-0.5	6162874	N	3550B	8081A	III
08-Dec-2010	SL-036-SA5B-SS-0.0-0.5	6162874	N	3550B	8082	III
08-Dec-2010	SL-036-SA5B-SS-0.0-0.5	6162874	N	3550B	8151A	III
08-Dec-2010	SL-036-SA5B-SS-0.0-0.5	6162874	N	3550B	8270C	III
08-Dec-2010	SL-036-SA5B-SS-0.0-0.5	6162874	N	3550B	8270C SIM	III
08-Dec-2010	SL-036-SA5B-SS-0.0-0.5	6162874	N	Gen Prep	9045M	III
08-Dec-2010	SL-036-SA5B-SS-0.0-0.5	6162874	N	METHOD	300.0	III
08-Dec-2010	SL-036-SA5B-SS-0.0-0.5	6162874	N	METHOD	314.0	III
08-Dec-2010	SL-036-SA5B-SS-0.0-0.5	6162874	N	METHOD	7471A	III
08-Dec-2010	SL-035-SA5B-SS-0.0-0.5	6162873	N	3050B	6010B	III
08-Dec-2010	SL-035-SA5B-SS-0.0-0.5	6162873	N	3050B	6020	III
08-Dec-2010	SL-035-SA5B-SS-0.0-0.5	6162873	N	3060A	7199	III
08-Dec-2010	SL-035-SA5B-SS-0.0-0.5	6162873	N	3550B	8081A	III
08-Dec-2010	SL-035-SA5B-SS-0.0-0.5	6162873	N	3550B	8082	III
08-Dec-2010	SL-035-SA5B-SS-0.0-0.5	6162873	N	3550B	8151A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Dec-2010	SL-035-SA5B-SS-0.0-0.5	6162873	N	3550B	8270C	III
08-Dec-2010	SL-035-SA5B-SS-0.0-0.5	6162873	N	3550B	8270C SIM	III
08-Dec-2010	SL-035-SA5B-SS-0.0-0.5	6162873	N	Gen Prep	9045M	III
08-Dec-2010	SL-035-SA5B-SS-0.0-0.5	6162873	N	METHOD	300.0	III
08-Dec-2010	SL-035-SA5B-SS-0.0-0.5	6162873	N	METHOD	314.0	III
08-Dec-2010	SL-035-SA5B-SS-0.0-0.5	6162873	N	METHOD	7471A	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5	6162871	N	3050B	6010B	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5	6162871	N	3050B	6020	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5	6162871	N	3060A	7199	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5	6162871	N	3550B	8081A	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5	6162871	N	3550B	8082	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5	6162871	N	3550B	8151A	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5	6162871	N	3550B	8270C	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5	6162871	N	3550B	8270C SIM	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5	6162871	N	Gen Prep	9045M	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5	6162871	N	METHOD	300.0	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5	6162871	N	METHOD	314.0	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5	6162871	N	METHOD	7471A	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5DUP	P162871D271729B	DUP	METHOD	300.0	III
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5MS	P162871R271743B	MS	METHOD	300.0	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	3050B	6010B	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	3050B	6020	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	3060A	7199	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	3546	1625C	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	3550B	8015B	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	3550B	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	3550B	8082	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	3550B	8270C	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	3550B	8270C SIM	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	5035	8015M	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	5035	8260B	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	5035	8260B SIM	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	8330	8330A	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	Gen Prep	9045M	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	METHOD	300.0	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	METHOD	314.0	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	METHOD	7471A	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	METHOD	8015B	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	METHOD	8015M	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	METHOD	8315A	III
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162855	N	METHOD	9012B	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	3050B	6010B	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	3050B	6020	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	3060A	7199	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	3546	1625C	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	3550B	8015B	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	3550B	8015M	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	3550B	8082	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	3550B	8270C	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	3550B	8270C SIM	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	5035	8015M	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	5035	8260B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	5035	8260B SIM	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	8330	8330A	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	Gen Prep	9045M	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	METHOD	300.0	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	METHOD	314.0	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	METHOD	7471A	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	METHOD	8015B	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	METHOD	8015M	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	METHOD	8315A	III
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162856	N	METHOD	9012B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	3050B	6010B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	3050B	6020	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	3060A	7199	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	3546	1625C	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	3550B	8015B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	3550B	8015M	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	3550B	8081A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	3550B	8082	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	3550B	8151A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	3550B	8270C	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	3550B	8270C SIM	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	5035	8015M	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	5035	8260B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	5035	8260B SIM	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	8330	8330A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	METHOD	300.0	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	METHOD	314.0	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	METHOD	6850	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	METHOD	7471A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	METHOD	8015B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	METHOD	8015M	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	METHOD	8315A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162864	N	METHOD	9012B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	3050B	6010B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	3050B	6020	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	3060A	7199	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	3546	1625C	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	3550B	8015B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	3550B	8015M	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	3550B	8081A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	3550B	8082	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	3550B	8151A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	3550B	8270C	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	3550B	8270C SIM	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	8330	8330A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	METHOD	300.0	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	METHOD	314.0	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	METHOD	6850	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	METHOD	7471A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	METHOD	8015B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	METHOD	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	METHOD	8315A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162865	MS	METHOD	9012B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	3050B	6010B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	3050B	6020	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	3546	1625C	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	3550B	8015B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	3550B	8015M	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	3550B	8081A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	3550B	8082	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	3550B	8151A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	3550B	8270C	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	3550B	8270C SIM	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	8330	8330A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	METHOD	6850	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	METHOD	7471A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	METHOD	8015B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	METHOD	8015M	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162866	MSD	METHOD	8315A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5DUP	6162867	DUP	3050B	6010B	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5DUP	6162867	DUP	3050B	6020	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5DUP	6162867	DUP	3060A	7199	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5DUP	6162867	DUP	Gen Prep	9045M	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5DUP	6162867	DUP	METHOD	300.0	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5DUP	6162867	DUP	METHOD	314.0	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5DUP	6162867	DUP	METHOD	7471A	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5DUP	6162867	DUP	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	P162864M241109A	MSD	3550B	8082	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	P162864M321119A	MSD	3550B	8015M	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	P162864R241051A	MS	3550B	8082	III
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	P162864R321054A	MS	3550B	8015M	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	3050B	6010B	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	3050B	6020	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	3060A	7199	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	3546	1625C	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	3550B	8015B	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	3550B	8015M	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	3550B	8082	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	3550B	8270C	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	3550B	8270C SIM	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	5035	8015M	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	5035	8260B	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	5035	8260B SIM	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	8330	8330A	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	Gen Prep	9045M	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	METHOD	300.0	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	METHOD	314.0	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	METHOD	6850	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	METHOD	7471A	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	METHOD	8015B	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	METHOD	8015M	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	METHOD	8315A	III
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162860	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	3050B	6010B	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	3050B	6020	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	3060A	7199	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	3546	1625C	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	3550B	8015B	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	3550B	8015M	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	3550B	8082	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	3550B	8270C	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	3550B	8270C SIM	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	5035	8015M	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	5035	8260B	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	5035	8260B SIM	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	8330	8330A	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	Gen Prep	9045M	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	METHOD	300.0	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	METHOD	314.0	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	METHOD	6850	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	METHOD	7471A	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	METHOD	8015B	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	METHOD	8015M	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	METHOD	8315A	III
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162861	N	METHOD	9012B	III
08-Dec-2010	TB-120810	6162859	TB	5030B	8015M	III
08-Dec-2010	TB-120810	6162859	TB	5030B	8260B	III
08-Dec-2010	TB-120810	6162859	TB	5030B	8260B SIM	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	3050B	6020	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	3060A	7199	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	3546	1625C	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	3550B	8015B	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	3550B	8015M	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	3550B	8082	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	3550B	8270C	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	3550B	8270C SIM	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	5035	8015M	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	5035	8260B	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	5035	8260B SIM	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	8330	8330A	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	Gen Prep	9045M	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	METHOD	300.0	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	METHOD	7471A	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	METHOD	8015B	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	METHOD	8015M	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	METHOD	8315A	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162875	N	METHOD	9012B	III
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0DUP	P162875D291045A	DUP	Gen Prep	9045M	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	3050B	6010B	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	3050B	6020	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	3060A	7199	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	3546	1625C	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	3550B	8015B	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	3550B	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	3550B	8082	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	3550B	8270C	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	3550B	8270C SIM	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	5035	8015M	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	5035	8260B	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	5035	8260B SIM	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	8330	8330A	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	Gen Prep	9045M	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	METHOD	300.0	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	METHOD	7471A	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	METHOD	8015B	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	METHOD	8015M	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	METHOD	8315A	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10	6162876	N	METHOD	9012B	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10MSD	P162876M321610A	MSD	METHOD	8015B	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10MSD	P162876M322209A	MSD	METHOD	8015M	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10MS	P162876R321555A	MS	METHOD	8015B	III
09-Dec-2010	SL-022-SA5C-SB-9.0-10MS	P162876R322153A	MS	METHOD	8015M	III
09-Dec-2010	EB01-SA5B-120910	6162868	EB	3005A	6010B	III
09-Dec-2010	EB01-SA5B-120910	6162868	EB	3020A	6020	III
09-Dec-2010	EB01-SA5B-120910	6162868	EB	3510C	8081A	III
09-Dec-2010	EB01-SA5B-120910	6162868	EB	3510C	8082	III
09-Dec-2010	EB01-SA5B-120910	6162868	EB	3510C	8270C	III
09-Dec-2010	EB01-SA5B-120910	6162868	EB	3510C	8270C SIM	III
09-Dec-2010	EB01-SA5B-120910	6162868	EB	Gen Prep	300.0	III
09-Dec-2010	EB01-SA5B-120910	6162868	EB	Gen Prep	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Dec-2010	EB01-SA5B-120910	6162868	EB	Gen Prep	7199	III
09-Dec-2010	EB01-SA5B-120910	6162868	EB	Gen Prep	9040B	III
09-Dec-2010	EB01-SA5B-120910	6162868	EB	METHOD	7470A	III
09-Dec-2010	EB01-SA5B-120910	6162868	EB	METHOD	8151A	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	3050B	6010B	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	3050B	6020	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	3060A	7199	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	3546	1625C	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	3550B	8015B	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	3550B	8015M	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	3550B	8082	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	3550B	8270C	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	3550B	8270C SIM	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	5035	8015M	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	5035	8260B	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	5035	8260B SIM	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	8330	8330A	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	Gen Prep	9045M	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	METHOD	300.0	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	METHOD	7471A	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	METHOD	8015B	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	METHOD	8015M	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	METHOD	8315A	III
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162877	N	METHOD	9012B	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	3050B	6010B	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	3060A	7199	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	3546	1625C	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	3550B	8015B	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	3550B	8015M	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	3550B	8082	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	3550B	8270C	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	3550B	8270C SIM	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	5035	8015M	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	5035	8260B	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	5035	8260B SIM	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	8330	8330A	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	Gen Prep	9045M	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	METHOD	300.0	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	METHOD	7471A	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	METHOD	8015B	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	METHOD	8015M	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	METHOD	8315A	III
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162878	N	METHOD	9012B	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	3050B	6010B	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	3050B	6020	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	3060A	7199	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	3546	1625C	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	3550B	8015B	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	3550B	8015M	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	3550B	8082	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	3550B	8270C SIM	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	5035	8015M	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	5035	8260B	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	5035	8260B SIM	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	8330	8330A	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	Gen Prep	9045M	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	METHOD	300.0	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	METHOD	7471A	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	METHOD	8015B	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	METHOD	8015M	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	METHOD	8315A	III
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162879	N	METHOD	9012B	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	3050B	6010B	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	3050B	6020	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	3060A	7199	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	3546	1625C	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	3550B	8015B	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	3550B	8015M	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	3550B	8082	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	3550B	8270C	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	3550B	8270C SIM	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	5035	8015M	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	5035	8260B	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	5035	8260B SIM	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	8330	8330A	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	METHOD	300.0	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	METHOD	7471A	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	METHOD	8015B	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	METHOD	8015M	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	METHOD	8315A	III
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162880	N	METHOD	9012B	III
09-Dec-2010	TB-120910	6162869	TB	5030B	8015M	III
09-Dec-2010	TB-120910	6162869	TB	5030B	8260B	III
09-Dec-2010	TB-120910	6162869	TB	5030B	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: EM

Method: 9040B **Matrix:** AQ

Sample ID: EB01-SA5B-120910 *Collected:* 12/9/2010 12:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PH	5.6		0.010	MDL	0.010	PQL	pH unit	J	H

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-012-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.0		0.89	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.1		0.98	MDL	1.2	PQL	mg/Kg	J	Q, E
Nitrate-NO3	1.5	J	0.98	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-013-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.5		0.88	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-013-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.6		0.88	MDL	1.1	PQL	mg/Kg	J	Q, E
Nitrate-NO3	1.2	J	0.88	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 2:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.87	MDL	1.6	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE033 **Laboratory:** LL

EDD Filename: PrepDE033_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-020-SA5C-SB-7.5-8.5 ***Collected:*** 12/8/2010 10:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.88	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5C-SB-4.0-5.0 ***Collected:*** 12/9/2010 9:56:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.88	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-022-SA5C-SB-9.0-10 ***Collected:*** 12/9/2010 10:02:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	37.0		1.8	MDL	2.3	PQL	mg/Kg	J	Q, E

Sample ID: SL-029-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 2:27:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-034-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 1:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.0		0.87	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-035-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 2:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.89	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-036-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 1:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.88	U	0.88	MDL	1.1	PQL	mg/Kg	UJ	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: PrepDE033_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 314.0 **Matrix: SO**

Sample ID: SL-016-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 4:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	12.2	J	9.9	MDL	33.0	PQL	ug/Kg	J	Z

Sample ID: SL-029-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	30.9	J	9.8	MDL	32.8	PQL	ug/Kg	U	B

Method Category: GENCHEM

Method: 9012B **Matrix: AQ**

Sample ID: EB14-SA5C-120810 *Collected:* 12/8/2010 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CYANIDE	0.0050	U	0.0050	MDL	0.010	PQL	mg/L	UJ	H

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-012-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.63	J	0.942	MDL	5.29	PQL	mg/Kg	J	Z
CALCIUM	5480		6.49	MDL	21.2	PQL	mg/Kg	J	E
POTASSIUM	3040		19.0	MDL	52.9	PQL	mg/Kg	J	Q
TIN	1.79	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.98	J	0.889	MDL	5.29	PQL	mg/Kg	J	Z

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.90	J	1.07	MDL	5.99	PQL	mg/Kg	J	Z
CALCIUM	5110		7.35	MDL	24.0	PQL	mg/Kg	J	E
POTASSIUM	2440		21.6	MDL	59.9	PQL	mg/Kg	J	Q
TIN	2.13	J	1.20	MDL	12.0	PQL	mg/Kg	U	B
Zirconium	4.32	J	1.01	MDL	5.99	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE033 **Laboratory:** LL

EDD Filename: PrepDE033_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-013-SA5C-SB-4.0-5.0 ***Collected:*** 12/9/2010 1:44:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.86	J	0.938	MDL	5.27	PQL	mg/Kg	J	Z
CALCIUM	2910		6.46	MDL	21.1	PQL	mg/Kg	J	E
POTASSIUM	2250		19.0	MDL	52.7	PQL	mg/Kg	J	Q
TIN	2.68	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	1.48	J	0.886	MDL	5.27	PQL	mg/Kg	J	Z

Sample ID: SL-013-SA5C-SB-9.0-10.0 ***Collected:*** 12/9/2010 1:52:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.48	J	0.929	MDL	5.22	PQL	mg/Kg	J	Z
CALCIUM	3070		6.40	MDL	20.9	PQL	mg/Kg	J	E
POTASSIUM	1940		18.8	MDL	52.2	PQL	mg/Kg	J	Q
TIN	1.78	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	0.977	J	0.877	MDL	5.22	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA5C-SB-4.0-5.0 ***Collected:*** 12/8/2010 2:33:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.53	J	0.946	MDL	5.31	PQL	mg/Kg	J	Z
CALCIUM	5110		6.51	MDL	21.2	PQL	mg/Kg	J	E
POTASSIUM	2990		19.1	MDL	53.1	PQL	mg/Kg	J	Q
TIN	2.12	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.56	J	0.892	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA5C-SB-9.0-10.0 ***Collected:*** 12/8/2010 2:40:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.75	J	0.949	MDL	5.33	PQL	mg/Kg	J	Z
CALCIUM	3440		6.54	MDL	21.3	PQL	mg/Kg	J	E
POTASSIUM	2480		19.2	MDL	53.3	PQL	mg/Kg	J	Q
TIN	2.01	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	0.933	J	0.896	MDL	5.33	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE033 **Laboratory:** LL

EDD Filename: PrepDE033_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-016-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 4:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.34	J	0.966	MDL	5.43	PQL	mg/Kg	J	Z
CALCIUM	5730		6.65	MDL	21.7	PQL	mg/Kg	J	E
POTASSIUM	2810		19.5	MDL	54.3	PQL	mg/Kg	J	Q
TIN	2.23	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.58	J	0.912	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 4:23:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.91	J	0.932	MDL	5.24	PQL	mg/Kg	J	Z
CALCIUM	4230		6.42	MDL	21.0	PQL	mg/Kg	J	E
POTASSIUM	2560		18.9	MDL	52.4	PQL	mg/Kg	J	Q
TIN	2.34	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	1.78	J	0.880	MDL	5.24	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 3:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.05	J	0.944	MDL	5.31	PQL	mg/Kg	J	Z
CALCIUM	4940		6.50	MDL	21.2	PQL	mg/Kg	J	E
POTASSIUM	2870		19.1	MDL	53.1	PQL	mg/Kg	J	Q
SODIUM	105	J	39.6	MDL	106	PQL	mg/Kg	J	Z
TIN	2.17	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.61	J	0.891	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-020-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 9:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.16	J	0.980	MDL	5.51	PQL	mg/Kg	J	Z
CALCIUM	6430		6.75	MDL	22.0	PQL	mg/Kg	J	E
POTASSIUM	2820		19.8	MDL	55.1	PQL	mg/Kg	J	Q
SODIUM	100	J	41.1	MDL	110	PQL	mg/Kg	J	Z
TIN	2.12	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.94	J	0.925	MDL	5.51	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 **Laboratory:** LL

EDD Filename: PrepDE033_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-020-SA5C-SB-7.5-8.5 *Collected:* 12/8/2010 10:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.73	J	0.956	MDL	5.37	PQL	mg/Kg	J	Z
CALCIUM	2010		6.58	MDL	21.5	PQL	mg/Kg	J	E
POTASSIUM	1680		19.3	MDL	53.7	PQL	mg/Kg	J	Q
TIN	2.05	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.52	J	0.902	MDL	5.37	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 11:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.16	J	0.923	MDL	5.19	PQL	mg/Kg	J	Z
CALCIUM	5430		6.36	MDL	20.7	PQL	mg/Kg	J	E
POTASSIUM	2480		18.7	MDL	51.9	PQL	mg/Kg	J	Q
TIN	1.68	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.05	J	0.871	MDL	5.19	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 12:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.17	J	0.944	MDL	5.31	PQL	mg/Kg	J	Z
CALCIUM	7450		6.50	MDL	21.2	PQL	mg/Kg	J	E
POTASSIUM	2770		19.1	MDL	53.1	PQL	mg/Kg	J	Q
TIN	2.44	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.71	J	0.891	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 9:56:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.80	J	0.958	MDL	5.38	PQL	mg/Kg	J	Z
CALCIUM	2110		6.60	MDL	21.5	PQL	mg/Kg	J	E
POTASSIUM	2220		19.4	MDL	53.8	PQL	mg/Kg	J	Q
TIN	2.00	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.37	J	0.904	MDL	5.38	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 **Laboratory:** LL

EDD Filename: PrepDE033_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-022-SA5C-SB-9.0-10 *Collected:* 12/9/2010 10:02:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.02	J	0.992	MDL	5.57	PQL	mg/Kg	J	Z
CALCIUM	2410		6.83	MDL	22.3	PQL	mg/Kg	J	E
POTASSIUM	1800		20.1	MDL	55.7	PQL	mg/Kg	J	Q
TIN	2.49	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.42	J	0.936	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:27:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.84	J	0.945	MDL	5.31	PQL	mg/Kg	J	Z
CALCIUM	4400		6.51	MDL	21.2	PQL	mg/Kg	J	E
POTASSIUM	2600		19.1	MDL	53.1	PQL	mg/Kg	J	Q
TIN	2.12	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.75	J	0.892	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-034-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:25:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.87	J	0.926	MDL	5.20	PQL	mg/Kg	J	Z
CALCIUM	3900		6.38	MDL	20.8	PQL	mg/Kg	J	E
POTASSIUM	3030		18.7	MDL	52.0	PQL	mg/Kg	J	Q
SODIUM	95.1	J	38.8	MDL	104	PQL	mg/Kg	J	Z
TIN	1.87	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.98	J	0.874	MDL	5.20	PQL	mg/Kg	J	Z

Sample ID: SL-035-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.94	J	0.967	MDL	5.43	PQL	mg/Kg	J	Z
CALCIUM	4030		6.66	MDL	21.7	PQL	mg/Kg	J	E
POTASSIUM	2240		19.6	MDL	54.3	PQL	mg/Kg	J	Q
SODIUM	105	J	40.5	MDL	109	PQL	mg/Kg	J	Z
TIN	1.63	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	4.03	J	0.913	MDL	5.43	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-036-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:45:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.38	J	0.965	MDL	5.42	PQL	mg/Kg	J	Z
CALCIUM	3500		6.65	MDL	21.7	PQL	mg/Kg	J	E
POTASSIUM	2300		19.5	MDL	54.2	PQL	mg/Kg	J	Q
SODIUM	83.6	J	40.5	MDL	108	PQL	mg/Kg	J	Z
TIN	1.96	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.09	J	0.911	MDL	5.42	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** AQ

Sample ID: EB01-SA5B-120910 *Collected:* 12/9/2010 12:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.00010	J	0.000080	MDL	0.00050	PQL	mg/L	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-012-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:05:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.102	J	0.0635	MDL	0.212	PQL	mg/Kg	UJ	Q, Q, E, B
ARSENIC	5.30		0.0635	MDL	0.423	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.626		0.0169	MDL	0.106	PQL	mg/Kg	J	E
CADMIUM	0.104	J	0.0381	MDL	0.106	PQL	mg/Kg	J	Z, Q
CHROMIUM	25.2		0.127	MDL	0.423	PQL	mg/Kg	J	Q, E, A
COBALT	8.00		0.0212	MDL	0.106	PQL	mg/Kg	J	E, A
COPPER	12.5		0.0698	MDL	0.423	PQL	mg/Kg	J	E, A
LEAD	8.70		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, E
NICKEL	12.8		0.106	MDL	0.423	PQL	mg/Kg	J	Q, A
SILVER	0.0279	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.417		0.0317	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	51.7		0.0233	MDL	0.106	PQL	mg/Kg	J	Q, E
ZINC	80.4		0.593	MDL	3.17	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-012-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:05:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.215	J	0.0423	MDL	0.423	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-012-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:05:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.393		0.0529	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-012-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:05:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	119		0.114	MDL	0.423	PQL	mg/Kg	J	E, E

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.134	J	0.0733	MDL	0.244	PQL	mg/Kg	UJ	Q, Q, E, B
ARSENIC	6.79		0.0733	MDL	0.489	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.442		0.0196	MDL	0.122	PQL	mg/Kg	J	E
CADMIUM	0.195		0.0440	MDL	0.122	PQL	mg/Kg	J	Q
CHROMIUM	37.3		0.147	MDL	0.489	PQL	mg/Kg	J	Q, E, A
COBALT	7.59		0.0244	MDL	0.122	PQL	mg/Kg	J	E, A
COPPER	10.3		0.0807	MDL	0.489	PQL	mg/Kg	J	E, A
LEAD	5.41		0.0127	MDL	0.244	PQL	mg/Kg	J	Q, E
NICKEL	19.3		0.122	MDL	0.489	PQL	mg/Kg	J	Q, A
SILVER	0.0168	J	0.0147	MDL	0.122	PQL	mg/Kg	J	Z, Q
THALLIUM	0.254		0.0367	MDL	0.122	PQL	mg/Kg	J	Q
VANADIUM	45.5		0.0269	MDL	0.122	PQL	mg/Kg	J	Q, E
ZINC	55.6		0.685	MDL	3.67	PQL	mg/Kg	J	E, A

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0888	J	0.0489	MDL	0.489	PQL	mg/Kg	J	Z, Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	3.87		0.0611	MDL	0.122	PQL	mg/Kg	J	Q

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	99.4		0.132	MDL	0.489	PQL	mg/Kg	J	E, E

Sample ID: SL-013-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:44:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.114	J	0.0651	MDL	0.217	PQL	mg/Kg	UJ	Q, Q, E, B
ARSENIC	8.17		0.0651	MDL	0.434	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.707		0.0174	MDL	0.109	PQL	mg/Kg	J	E
CADMIUM	0.170		0.0391	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	22.3		0.130	MDL	0.434	PQL	mg/Kg	J	Q, E, A
COBALT	7.27		0.0217	MDL	0.109	PQL	mg/Kg	J	E, A
COPPER	10.4		0.0717	MDL	0.434	PQL	mg/Kg	J	E, A
LEAD	8.53		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, E
NICKEL	12.8		0.109	MDL	0.434	PQL	mg/Kg	J	Q, A
SILVER	0.0413	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.350		0.0326	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	45.0		0.0239	MDL	0.109	PQL	mg/Kg	J	Q, E
ZINC	71.3		0.608	MDL	3.26	PQL	mg/Kg	J	E, A

Sample ID: SL-013-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:44:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.204	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-013-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:44:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.824		0.0543	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE033 **Laboratory:** LL

EDD Filename: PrepDE033_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-013-SA5C-SB-4.0-5.0 ***Collected:*** 12/9/2010 1:44:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	118		0.117	MDL	0.434	PQL	mg/Kg	J	E, E

Sample ID: SL-013-SA5C-SB-9.0-10.0 ***Collected:*** 12/9/2010 1:52:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0658	U	0.0658	MDL	0.219	PQL	mg/Kg	R	Q
ARSENIC	6.13		0.0658	MDL	0.439	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.567		0.0175	MDL	0.110	PQL	mg/Kg	J	E
CADMIUM	0.120		0.0395	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	18.6		0.132	MDL	0.439	PQL	mg/Kg	J	Q, E, A
COBALT	6.05		0.0219	MDL	0.110	PQL	mg/Kg	J	E, A
COPPER	9.51		0.0724	MDL	0.439	PQL	mg/Kg	J	E, A
LEAD	6.65		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, E
NICKEL	10.9		0.110	MDL	0.439	PQL	mg/Kg	J	Q, A
SILVER	0.0312	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.333		0.0329	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	39.2		0.0241	MDL	0.110	PQL	mg/Kg	J	Q, E
ZINC	61.7		0.614	MDL	3.29	PQL	mg/Kg	J	E, A

Sample ID: SL-013-SA5C-SB-9.0-10.0 ***Collected:*** 12/9/2010 1:52:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.116	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-013-SA5C-SB-9.0-10.0 ***Collected:*** 12/9/2010 1:52:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.429		0.0548	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-013-SA5C-SB-9.0-10.0 ***Collected:*** 12/9/2010 1:52:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	109		0.118	MDL	0.439	PQL	mg/Kg	J	E, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE033 **Laboratory:** LL

EDD Filename: PrepDE033_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-015-SA5C-SB-4.0-5.0 ***Collected:*** 12/8/2010 2:33:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0688	J	0.0656	MDL	0.219	PQL	mg/Kg	UJ	Q, Q, E, B
ARSENIC	6.65		0.0656	MDL	0.438	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.843		0.0175	MDL	0.109	PQL	mg/Kg	J	E
CADMIUM	0.153		0.0394	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	34.0		0.131	MDL	0.438	PQL	mg/Kg	J	Q, E, A
COBALT	9.37		0.0219	MDL	0.109	PQL	mg/Kg	J	E, A
COPPER	11.4		0.0722	MDL	0.438	PQL	mg/Kg	J	E, A
LEAD	9.41		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, E
NICKEL	14.8		0.109	MDL	0.438	PQL	mg/Kg	J	Q, A
SILVER	0.0235	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.345		0.0328	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	68.8		0.0241	MDL	0.109	PQL	mg/Kg	J	Q, E
ZINC	76.6		0.613	MDL	3.28	PQL	mg/Kg	J	E, A

Sample ID: SL-015-SA5C-SB-4.0-5.0 ***Collected:*** 12/8/2010 2:33:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.256	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-015-SA5C-SB-4.0-5.0 ***Collected:*** 12/8/2010 2:33:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.450		0.0547	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-015-SA5C-SB-4.0-5.0 ***Collected:*** 12/8/2010 2:33:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	115		0.118	MDL	0.438	PQL	mg/Kg	J	E, E

Sample ID: SL-015-SA5C-SB-9.0-10.0 ***Collected:*** 12/8/2010 2:40:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0640	U	0.0640	MDL	0.213	PQL	mg/Kg	R	Q
ARSENIC	5.33		0.0640	MDL	0.427	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.546		0.0171	MDL	0.107	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-015-SA5C-SB-9.0-10.0 **Collected:** 12/8/2010 2:40:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.137		0.0384	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	18.1		0.128	MDL	0.427	PQL	mg/Kg	J	Q, E, A
COBALT	6.10		0.0213	MDL	0.107	PQL	mg/Kg	J	E, A
COPPER	8.33		0.0704	MDL	0.427	PQL	mg/Kg	J	E, A
LEAD	7.09		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, E
NICKEL	10.5		0.107	MDL	0.427	PQL	mg/Kg	J	Q, A
SILVER	0.0229	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.366		0.0320	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	36.4		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, E
ZINC	78.1		0.597	MDL	3.20	PQL	mg/Kg	J	E, A

Sample ID: SL-015-SA5C-SB-9.0-10.0 **Collected:** 12/8/2010 2:40:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.115	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-015-SA5C-SB-9.0-10.0 **Collected:** 12/8/2010 2:40:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.515		0.0533	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-015-SA5C-SB-9.0-10.0 **Collected:** 12/8/2010 2:40:00 **Analysis Type:** REA9 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	100		0.115	MDL	0.427	PQL	mg/Kg	J	E, E

Sample ID: SL-016-SA5C-SB-4.0-5.0 **Collected:** 12/8/2010 4:10:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0633	U	0.0633	MDL	0.211	PQL	mg/Kg	R	Q
ARSENIC	4.44		0.0633	MDL	0.422	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.510		0.0169	MDL	0.105	PQL	mg/Kg	J	E
CADMIUM	0.0751	J	0.0380	MDL	0.105	PQL	mg/Kg	J	Z, Q
CHROMIUM	16.8		0.127	MDL	0.422	PQL	mg/Kg	J	Q, E, A
COBALT	5.61		0.0211	MDL	0.105	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-016-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 4:10:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.21		0.0696	MDL	0.422	PQL	mg/Kg	J	E, A
LEAD	5.60		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, E
NICKEL	9.36		0.105	MDL	0.422	PQL	mg/Kg	J	Q, A
SILVER	0.0261	J	0.0127	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.269		0.0316	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	36.5		0.0232	MDL	0.105	PQL	mg/Kg	J	Q, E
ZINC	59.2		0.590	MDL	3.16	PQL	mg/Kg	J	E, A

Sample ID: SL-016-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 4:10:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.124	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-016-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 4:10:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.456		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-016-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 4:10:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	97.0		0.114	MDL	0.422	PQL	mg/Kg	J	E, E

Sample ID: SL-016-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 4:23:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0952	J	0.0647	MDL	0.216	PQL	mg/Kg	UJ	Q, Q, E, B
ARSENIC	7.33		0.0647	MDL	0.431	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.577		0.0173	MDL	0.108	PQL	mg/Kg	J	E
CADMIUM	0.198		0.0388	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	24.3		0.129	MDL	0.431	PQL	mg/Kg	J	Q, E, A
COBALT	6.83		0.0216	MDL	0.108	PQL	mg/Kg	J	E, A
COPPER	10.9		0.0712	MDL	0.431	PQL	mg/Kg	J	E, A
LEAD	7.77		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, E
NICKEL	12.8		0.108	MDL	0.431	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: PrepDE033_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-016-SA5C-SB-9.0-10.0 **Collected:** 12/8/2010 4:23:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0334	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.364		0.0324	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	44.2		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, E
ZINC	84.4		0.604	MDL	3.24	PQL	mg/Kg	J	E, A

Sample ID: SL-016-SA5C-SB-9.0-10.0 **Collected:** 12/8/2010 4:23:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.170	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-016-SA5C-SB-9.0-10.0 **Collected:** 12/8/2010 4:23:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.863		0.0539	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-016-SA5C-SB-9.0-10.0 **Collected:** 12/8/2010 4:23:00 **Analysis Type:** REA9 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	110		0.116	MDL	0.431	PQL	mg/Kg	J	E, E

Sample ID: SL-017-SA5B-SS-0.0-0.5 **Collected:** 12/8/2010 3:30:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.140	J	0.0649	MDL	0.216	PQL	mg/Kg	UJ	Q, Q, E, B
ARSENIC	5.99		0.0649	MDL	0.433	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.662		0.0173	MDL	0.108	PQL	mg/Kg	J	E
CADMIUM	0.117		0.0390	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	24.2		0.130	MDL	0.433	PQL	mg/Kg	J	Q, E, A
COBALT	6.51		0.0216	MDL	0.108	PQL	mg/Kg	J	E, A
COPPER	11.0		0.0714	MDL	0.433	PQL	mg/Kg	J	E, A
LEAD	7.20		0.0113	MDL	0.216	PQL	mg/Kg	J	Q, E
NICKEL	13.2		0.108	MDL	0.433	PQL	mg/Kg	J	Q, A
SILVER	0.0385	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.284		0.0325	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	41.6		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-017-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 3:30:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	86.8		0.606	MDL	3.25	PQL	mg/Kg	J	E, A

Sample ID: SL-017-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 3:30:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.190	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-017-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 3:30:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.24		0.0541	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-017-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 3:30:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	109		0.117	MDL	0.433	PQL	mg/Kg	J	E, E

Sample ID: SL-020-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 9:55:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0642	U	0.0642	MDL	0.214	PQL	mg/Kg	R	Q
ARSENIC	4.89		0.0642	MDL	0.428	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.575		0.0171	MDL	0.107	PQL	mg/Kg	J	E
CADMIUM	0.138		0.0385	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	21.4		0.128	MDL	0.428	PQL	mg/Kg	J	Q, E, A
COBALT	6.66		0.0214	MDL	0.107	PQL	mg/Kg	J	E, A
COPPER	10.1		0.0706	MDL	0.428	PQL	mg/Kg	J	E, A
LEAD	7.74		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, E
NICKEL	12.3		0.107	MDL	0.428	PQL	mg/Kg	J	Q, A
SILVER	0.0350	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.325		0.0321	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	42.2		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, E
ZINC	59.6		0.599	MDL	3.21	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling